

Rush-Presbyterian-St. Luke's Medical Center

Chicago

Rush University
College of Nursing and
Allied Health Sciences
Bulletin

College of Nursing and Allied Health Sciences Rush University Tentative Calendar 1975-1977

1975-76	Fall Quarter	1976-77
September 25-26	Orientation, Registration	September 23-24
September 29	Classes Begin	September 27
November 27-28	Thanksgiving Recess	November 25-26
December 5	Last Day of Classes	December 3
December 8-12	Reading and Examination Period December 6-1	
December 13-Jan. 4	Winter Break	December 11-Jan. 2
	Winter Quarter	
January 5	First Day of Classes	January 3
March 12	Last Day of Classes	March 11
March 15-19	Reading and Examination Period	March 14-18
March 20-28	Spring Break	March 19-27
	Spring Quarter	
March 29	First Day of Classes	March 28
May 31	Memorial Day	May 30
June 4	Last Day of Classes	June 3
June 7-11	Reading and Examination Period	June 6-10
June 12	Commencement	June 11
June 12-July 5	Summer Break	June 11-July 4
	Summer Quarter	BANG BANG SERVER
July 6	First Day of Classes	July 5
September 6	Labor Day	September 5
September 10	Last Day of Classes	September 9
September 13-17	Reading and Examination Period	September 12-16
September 18-26	Fall Break	September 17-25

1

Rush-Presbyterian-St. Luke's Medical Center

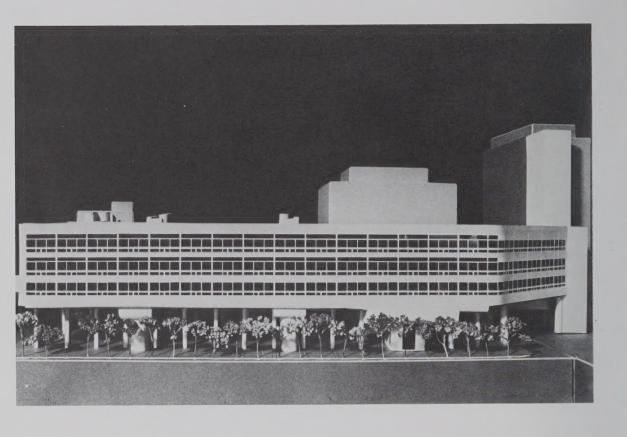
Chicago

Rush University College of Nursing and Allied Health Sciences Bulletin

This bulletin is published for the faculty, students, and prospective students of the College of Nursing and Allied Health Sciences of Rush University.

The University reserves the right to make changes in any or all specifications contained herein and to apply such revision to present and new students alike.

The new Rush University Academic Facility will be open to students of the College of Nursing and Allied Health Sciences beginning in the 1976-77 academic year. The \$22 million building will have direct connections to Presbyterian-St. Luke's Hospital and patient care and research facilities in the Jelke South Center Building, the Professional Building, and the Johnston R. Bowman Health Center for the Elderly.



Contents

Calendar	Inside Front Cover	
The Philosophy	5	
The Rush Tradition	7	
The College of Nursing and Allied Health Science	ees 8	
Affiliated Colleges	11	
Admissions	27	
Financial Affairs	33	
Rush University Campus and Student Life	37	
Academic Policies	43	
Undergraduate Nursing and Medical Technology	49	
Graduate Program in Clinical Nutrition	59	
Graduate Programs in Nursing	63	
Course Descriptions	71	
Course Offerings	75	
Faculty Roster	93	
Organization	99	
Index	101	
Schools of Rush	102	
Medical Center Map	Inside Back Cover	



"The academic medical center affords the best opportunity for health professionals to study their roles and their responsibilities for patient care, and to carry out some healthy introspection into how their relationships with one another and other members of the hospital health team may affect the well-being of patients." James A. Campbell, M.D., President, Rush-Presbyterian-St. Luke's Medical Center



The Philosophy

The philosophy of the College of Nursing and Allied Health Sciences of Rush University is reflected by curricula designed to help guide students and faculty to conceptualize learning and health care practice in terms of urgent present and future health needs of society. This philosophy embraces the Rush University commitment to freedom of inquiry, excellence in scholarship and service, and innovative leadership in the delivery of health care.

Nursing and other health professions are approached as applied sciences with all of the scientific rigor implied by this concept. The ability to work harmoniously and productively with members of all the various health professions, and to contribute constructively to reform in the provision of health services to society, are integral components

of the philosophy of the College.

All of us—the College of Nursing and Allied Health Sciences, Rush University, Rush-Presbyterian-St. Luke's Medical Center, and each of the affiliated colleges—share a commitment to offer our students the opportunity to achieve both breadth and depth in preparation for their careers in the health professions.



Schweppe Sprague Hall...housing new laboratories for basic and clinical sciences, classrooms, student lounges, and faculty offices... is the focal point of activity of the College of Nursing and Allied Health Sciences.

Directly across the street are Presbyterian-St. Luke's Hospital and Health Center, Medical Center research facilities, and the Rush Library.



The University and The Medical Center

The establishment of Rush University in 1972 by the Executive Board and the Trustees of Rush-Presbyterian-St. Luke's Medical Center represents a combined heritage that stretches back to 1837. On March 2nd of that year, the Illinois State Legislature chartered Rush Medical College—two days before the city of Chicago was incorporated.

Forty-eight years later, in 1885, the first antecedent of the College of Nursing and Allied Health Sciences, the St. Luke's Hospital Training School of Nurses, opened its doors to offer diploma education in nursing. In 1903, the Presbyterian Hospital School of Nursing accepted its first students and from 1956 until 1968, nurses were taught at the merged Presbyterian-St. Luke's Hospital School of Nursing. Before the establishment of the College of Nursing and Allied Health Sciences in 1973 a total of 7,221 nurses had graduated from these three schools. Many made outstanding contributions to the field of nursing.

From 1959 until 1973, Presbyterian-St. Luke's Hospital sponsored a School of Medical Technology which was the second largest program of its kind in the city of Chicago. During this time, the one-year professional internship program for students completing requirements for the Bachelor of Science degree in Medical Technology certified over 200 students.

The forebears of Rush Graduate College, which will train scholars in the basic sciences, can be traced to early members of the Rush Medical College faculty whose scientific inquiries led to numerous advances in the field of medicine.

Today Rush University continues to build on its tradition of commitment to the education of future health care practitioners and to the establishment of a rational system for the delivery of care to all segments of the population. The University is fully accredited by the North Central Association of Colleges and Secondary Schools to offer programs leading to the baccalaureate, master's and Ph.D. degrees, as well as the M.D. degree. The College of Nursing and Allied Health Sciences is accredited by the National Accrediting Agency for Clinical Laboratory Sciences, and is a candidate for accreditation by the National League for Nursing.

As an integral element of Rush-Presbyterian-St. Luke's Medical Center, which was incorporated in 1969, Rush University is part of a cooperative health care delivery system which serves approximately 1.5 million people through its own resources and those of affiliated health care and academic institutions. At the Medical Center more than \$5 million is budgeted each year to carry out basic research and clinical investigation in traditional disciplines and in multi-disciplinary areas, including nursing and allied health.

The Rush academic tradition bases the learning environment in the health care system. Rush-Presbyterian-St. Luke's Medical Center is the primary classroom of Rush University.

The College of Nursing and Allied Health Sciences

The Commitment

The College of Nursing and Allied Health Sciences is an integral component of the Rush tradition. Convinced that education of health professionals is best achieved in an institution committed to both education and service, the Executive Board and The Trustees of Rush-Presbyterian-St. Luke's Medical Center established Rush University and each of its colleges. They were responding to the current status of health care in our country: Health services have become highly specialized and fragmented without adequate coordination for total patient care. Uneven distribution of services in urban, suburban, and rural areas has made health care inaccessible to many Americans. Traditional roles in the delivery of health services are changing—and must continue to change on a planned and rational basis. Health services, which have been primarily acute-care oriented, must increasingly emphasize health maintenance and illness prevention.

By the 1980's there will be more career opportunities in the health professions than in any other field. Knowledge in the medical sciences is expanding rapidly, and with increased population and longevity, more people require a broader range of health services than ever before. In order to serve patients effectively, it is estimated that in addition to the physician at least five other health professionals are needed to deliver care.

Traditional approaches to health care delivery were based on giving care to the seriously ill. Today, only about 12 per cent of the population require such care. Nurses, medical technologists, and clinical nutritionists also work together with physicians and other health professionals to care for the rest, people who are well and need to be kept well. They care for people who are worried about their health and require reassurance as well as medical assessment; people who are sick and need to be returned to good health; and people who are seriously ill and require ongoing care.

The health professions have always attracted individuals who have a deep concern for others. But concern alone is not enough. A vast range of knowledge and skills is needed as well as sensitivity.

The level of sophistication that is required of nurses and allied health professionals calls for a background beyond a hospital school certificate or an associate's degree. Only a university program rooted in a health care institution can provide the broad academic and experiential base upon which to build a profession, a satisfying career, and the foundation for continued study in the field of health.

In 1975, Rush University conferred its first baccalaureate and master's degrees upon graduates of the College of Nursing and Allied Health Sciences.

Programs

Today the College of Nursing and Allied Health Sciences, in affiliation with fourteen liberal arts colleges and universities, offers programs leading to the Bachelor of Science (B.S.) degree, with majors in nursing and medical technology; and the Master of Science (M.S.) degree, with majors in nursing and clinical nutrition. Post-master's study in geriatric nursing is offered and a program leading to the Doctor of Nursing (D.N.) degree is being developed.

In keeping with the belief that quality health care begins with the quality education of the people who deliver that care, the College of Nursing and Allied Health Sciences has initiated an educational network which provides Rush students with the opportunity to utilize the learning resources of both the liberal arts campus and the academic medical center.

During the first two or three years of the baccalaureate program in nursing and medical technology, Rush students acquire a solid foundation in the humanities and in the basic behavioral, biological and physical sciences in a place where these subjects can best be taught—a liberal arts college or university. The pre-health curriculum is taken at an affiliated college of the student's choice. Rush believes that a liberal arts education, in addition to providing a foundation upon which to build, helps engender a special set of sensibilities and thought processes that are critical to practicing health professionals.

The concepts acquired in the first years are the basis for the core of advanced courses and clinical experiences at the Rush University campus, Rush-Presbyterian-St. Luke's Medical Center, in the final two years of the program.

Graduate students in nursing and clinical nutrition begin their studies on the Rush University campus and utilize the clinical, academic, and research resources of the Medical Center throughout their program.

Students of the College of Nursing and Allied Health Sciences will not find traditional faculty overseeing their classroom or clinical experiences. Instead, they will have the opportunity and responsibility to learn from liberal arts faculties whose primary responsibility is teaching, basic scientists who apply as well as profess their knowledge, practitioner/teacher nurses and clinical nutritionists who care for their own patients, and practicing medical technologists. The faculty of the College of Nursing and Allied Health Sciences is committed to the concept of the health care practitioner as humanist and applied scientist.



"If the patient is viewed as a vital link to care, instead of as a passive recipient of care, he will become involved to a great extent as a helpful and knowledgeable person in the planning and management of his illness and the specific elements of his care."

Luther Christman, Ph.D., Dean,
College of Nursing and Allied Health Sciences



Affiliated Colleges

Students who seek entrance to the baccalaureate programs in nursing and medical technology at the College of Nursing and Allied Health Sciences apply directly to the affiliated colleges of their choice. Each college provides an excellent basis for the professional portion of the undergraduate programs at the Rush campus.

The participation of each affiliated college with Rush is unique. Carleton and Grinnell ask that students spend three years on their campuses before coming to Rush for the final two years. The other twelve schools require a minimum of two years academic residence. Several schools offer dual degrees—one from Rush with a major in nursing or medical technology, and one from the affiliated college in another major. Each campus specifies requirements for the second degree. Lake Forest and Carleton participate only in the undergraduate nursing program. The pre-health curriculum also varies from campus to campus because of scheduling, curricular offerings and course descriptions. For specifics about each college it is best to check with the admissions office or health careers advisor on the campus. The affiliated colleges are:

Beloit College
Carleton College
Coe College
The Colorado College
Cornell College
Fisk University
Grinnell College
Illinois Institute of Technology
Knox College
Lake Forest College
Lawrence University
Macalester College
Monmouth College
Ripon College

Although the colleges are characterized by their own styles, traditions and programs, each is noted for its academic excellence and liberal arts tradition. The choice of where students spend the first years of undergraduate study is their decision. They may choose any one of the fourteen affiliated colleges. Each is a port of entry to the baccalaureate programs of the College of Nursing and Allied Health Sciences, Rush University. We hope that the following brief descriptions of each of the colleges will help students make informed decisions.

Beloit College Beloit, WI 53511 (608) 365-3391





Enrollment 1974-75

Total: 1656

Men: 781 Women: 875

Calendar Trimester Plan

Admissions Tests Required S.A.T. or A.C.T. encouraged, but not required

Admissions Interview Encouraged, but not required

Costs 1975-76 Total: \$4580

Tuition: \$3300

Room and Board: \$1280

Learning at Beloit is a personal experience.

Beloit is the kind of place for self-motivated people who are challenged by problems, and open to new ideas. It's the kind of place for people who find more personal satisfaction in learning itself than in grades alone.

A college rich in the liberal arts tradition, and founded two years before Wisconsin became a state, Beloit combines a strong academic emphasis with flexibility and personal concern.

At Beloit, there is one faculty member for every fourteen students; and a Faculty Mentor is assigned to each twenty entering underclassmen to facilitate their transition into the college community.

Classes are generally small and are taught by highly qualified faculty. About 75 per cent of all faculty members hold the doctoral degree; 100 per cent of the science faculty have attained the doctorate. The 112,000-square-foot science facility has its own observatory, laboratories, and equipment, which is available to students who conduct their own research projects.

The 65-acre wooded campus is located in a community of 36,000 surrounded by farmland on the Wisconsin-Illinois border. Beloit is 100 miles from Chicago, 75 miles from Milwaukee and Lake Michigan, and 50 miles from Madison, Wisconsin. Students from 20 foreign countries and almost every state attend classes on the Beloit campus year-round.

Carleton College Northfield, MN 55057 (507) 645-4431 ext. 511





Enrollment 1974-75

Total: 1752

Men: 916 Women: 836

Calendar 3-3-3 Plan

Admissions Tests Required S.A.T., English Comp. achievement test, 2 other achievement tests

Admissions Interview Recommended

Costs 1975-76 Total: \$4600

> Tuition and Fees: \$3275 Room and Board: \$1325

The definition of a Carleton College education has approximately 1700 variations, as is evident in the broad selection of majors chosen by some 1700 students either from conventional fields of interest or planned on an individualized basis.

Diversity and individuality both in the student body and in academic programs are an integral part of Carleton's purpose, which is the liberal education of the young men and women who pass through this institution during their life-long pursuit of knowledge. Carleton students are encouraged to develop their abilities to make informed and responsible decisions with respect to themselves and the world around them—judgments of reason and imagination that will challenge any threat to the freedom and dignity of man.

Carleton's academic facilities and physical setting are appropriate to the size and character of its 90-acre main campus, which includes Lyman Lakes, a fine library, science center, classrooms and other facilities.

Carleton is located in the rural southeastern Minnesota community of Northfield, a city of 10,000 about 40 miles south of the Twin Cities of Minneapolis and St. Paul.

Coe College Cedar Rapids, IA 52402 (319) 364-1511 ext. 321, 322 (from Iowa 1-800-332-8404)





Enrollment 1974-75

Total: 1124

Men: 615 Women: 426 part-time: 83

Calendar 4-1-4 Plan

Admissions Tests Required S.A.T. or A.C.T.

Admissions Interview
Encouraged, but not required

Costs 1975-76 Total: \$3750

Tuition and Fees: \$2700 Room and Board: \$1050

At Coe, the responsibility for a meaningful and personally tailored college experience rests with the student. Students have opportunities to design their own educational plan; to spend a single term or an entire academic year studying in one of some 50 foreign and domestic academic programs; to develop a work/service project or internship in a particular field in order to test out career possibilities; or simply to follow an established pattern of selected courses representative of liberal arts. There are also programs leading to a certificate of competence in community service, a concentration in the humanities, and a new biosocial science concentration.

An interdepartmental concentration in general science, developed especially for students interested in health science careers, is offered along with majors in 27 other departmental and interdepartmental areas. The student faculty ratio at Coe is 13 to 1.

Coe was the only college or university in Iowa to receive a Ford Foundation Venture Grant for innovative programming. In 1974, a grant from the National Endowment for the Humanities established the humanities concentration on campus.

Established in 1851, the Coe College campus is located in Cedar Rapids, Iowa, a city of 135,000 people. Many special events are planned throughout the 1976 calendar year to celebrate the 125th anniversary of the college, including special speakers and guests, fine arts events and convocations. Cedar Rapids is the home of a thriving community theater, a sophisticated arts center, and the oldest symphony orchestra west of the Mississippi River.

The Colorado College Colorado Springs, CO 80903 (303) 473-2233, ext. 219, 220



Enrollment 1974-75

Total: 1900

Men: 1000 Women: 900

Calendar Block Plan

Admissions Tests Required S.A.T. or A.C.T.

Admissions Interview
Not required

Costs 1975-76 Total: \$4300

> Tuition and Fees: \$3100 Room and Board: \$1200

Colorado College offers an innovative departure from the view of education as business as usual. Under the Colorado College Plan, the academic year is divided into nine 3½-week "blocks," separated by 4½-day block breaks. Most courses are completed in one block, though a few span two or even three blocks. A student takes only one course per block.

The Colorado College Plan holds many advantages: it has reduced class size to an average of 15 students; it allows freedom in scheduling classes, so that an astronomy class might meet at midnight or a biology class can go into the field for a week; it allows the College to attract distinguished visiting professors with ease; and it has contributed to greater involvement in the educational process on the part of the students.

Colorado College is an independent, coeducational liberal arts college. It occupies a 79-acre campus in Colorado Springs, a city of 160,000 in a metropolitan area of 280,000. It is located at a point where the high western plains meet the Rocky Mountains. The surrounding area offers a natural laboratory for many disciplines, as well as a variety of recreational activities.

Cornell CollegeMt. Vernon, IA 52314
(319) 895-8149





Enrollment 1974-75

Total: 951

Men: 517 Women: 434

Calendar 4-1-4 **P**lan

Admissions Tests Required S.A.T. or A.C.T.

Admissions Interview Recommended

Costs 1975-76 Total: \$4340

Tuition: \$3200

Room and Board: \$1140

Free expression of ideas, learning in small classes, the opportunity for students to know professors and to express creative interests and talents—this is the kind of atmosphere in which Cornell students live and learn.

Both academic and social experiences at Cornell are intended to prepare students to lead useful lives of integrity and service to their fellow human beings. The Cornell Plan offers four different approaches to undergraduate study. A student may complete traditional study in any of 25 major fields, or may design his or her own degree program in accordance with career plans and objectives in higher education.

Cornell has an excellent teaching faculty in all departments. Each science professor has attained the Ph.D. in his or her field and has prepared many Cornell students for careers in the health care sciences.

The college is located on a beautifully wooded 100-acre hilltop campus 15 miles east of the city of Cedar Rapids, Iowa. Student life is informal. Residency halls are self-governed.

Fisk UniversityNashville, TN 37203
(615) 329-9111, ext. 276





Enrollment 1974-75

Total: 1518

Men: 584 Women: 934

Calendar Semester

Admissions Tests Required S.A.T. or A.C.T.

Admissions Interview
Not required

Costs 1975-76 Total: \$3375

Tuition: \$2090

Room and Board: \$1285

Learning at Fisk University is a dynamic, living experience. The university presents numerous socially-oriented programs through an interdisciplinary approach to higher education. At Fisk, Black Studies becomes part of a balanced, intracurricular program.

Fisk is located on a 40-acre campus near the downtown area of Nashville, Tennessee. It offers programs leading to the B.A., B.S., and M.A. degrees in 22 major areas of study in the social sciences, natural sciences, mathematics, humanities, physical education and health.

The traditional excellence of Fisk's programs and its students is evidenced by the fact that in 1930, Fisk became the first Black college to receive full accreditation by the Southern Association of Colleges and Schools. In 1952, the school established a chapter of the Phi Beta Kappa Honor Society. In 1975, Fisk became the first predominantly Black institution to have a national chapter of Mortar Board. Other national academic societies, as well as major Black national sororities and fraternities, have chapters on the Fisk campus.

For sports enthusiasts, complete outdoor sports and recreation facilities, including athletic fields and tennis courts, are available. A municipal golf course is nearby. Fisk students have the opportunity to participate regularly in intercollegiate sports competition.

Grinnell CollegeGrinnell, IA 50112
(515) 236-4848



Enrollment 1974-75

Total: 1197 Men: 62

Men: 624 Women: 573

Calendar Semester Plan

Admissions Tests Required S.A.T. or A.C.T.

Admissions Interview Required

Costs 1975-76 Total: \$4620

Tuition and Fees: \$3540 Room and Board: \$1080

Grinnell is a private, coeducational, liberal arts college that enrolls students from all parts of the United States and from many foreign countries. Life on the Grinnell campus is informal and individualistic.

Grinnell stresses an integration of private and public responsibility: the first with its attributes of self-knowledge, intellectual self-reliance and discipline, the second with its qualities of social conscience and concern for public welfare.

Grinnell offers courses of study in the humanities, sciences, social studies, elementary and secondary education, physical education, and other programs. A faculty-student ratio of 1 to 12 permits ample opportunity for independent study, including the Freshman Tutorial Program, guided reading, special projects, and advanced group study.

The 90-acre tree-lined campus has 35 buildings in an unusually pleasant setting. Recreational facilities, including the new Physical Education Complex, are available throughout the school year.

Illinois Institute of Technology Chicago, IL 60616 (312) 567-3025



Enrollment 1974-75

Total: 3150

Men: 2750 Women: 400

Calendar Semester Plan

Admissions Tests Required S.A.T. or A.C.T.

Admissions Interview Recommended

Costs 1975-76 Total: \$3750

Tuition: \$2500

Room and Board: \$1250

Illinois Institute of Technology is a private, coeducational university offering professionally-oriented undergraduate and graduate programs in six colleges and schools. More than 30 fields of study are offered in disciplines such as engineering, science, liberal arts, management, economics, architecture, design, city planning, and law. In addition, excellent pre-professional programs are available to prepare students for postgraduate study in medicine, dentistry and law.

Because of IIT's scope and flexibility, students have the opportunity to achieve both personal and professional goals. Opportunities to investigate a broad range of disciplines, pursue specialized programs in nontraditional areas such as biomedical engineering, and, with approval, to design individualized programs, are part of the IIT approach to learning. In all areas, including biology, chemistry, and physics, IIT excels on the undergraduate, graduate, and research levels.

The 120-acre campus is located on the near South Side of Chicago, approximately four miles from the Chicago Loop. Campus facilities include the IIT Research Institute, the Institute of Gas Technology, the John Crerar Library (1,200,000 volumes), a shopping center and service station, gymnasium and recreation area, six dormitories, nine resident fraternity houses and the student union.

Applications are welcome from all students who are earnestly interested in an education that prepares them for professional practice.

Knox College Galesburg, IL 61401 (309) 343-0112





Enrollment 1974-75

Total: 1223

Men: 686 Women: 537

Calendar 3-3-3 Plan

Admissions Tests Required S.A.T. or A.C.T.

Admissions Interview Recommended

Costs 1975-76 Total: \$4529

Tuition: \$3329

Room and Board: \$1200

Learning is an enterprise and a responsibility that is shared by both students and faculty at Knox College. Flexibility and diversity characterize the academic life and stimulate intellectual and personal growth, knowledge and self-understanding.

Knox occupies a large campus rich in historical tradition but modern in facilities. Founded in 1837, the college is deeply committed to the needs of students living in today's society. Typical of the institution's progressive spirit is its new \$6.3-million Sharvy G. Umbeck Science-Mathematics Center.

It is a policy at Knox that senior professors teach a number of the introductory courses, giving new students an early opportunity to study under the top scholars on the faculty. Although most faculty members hold the Ph.D. degree, they serve primarily as teachers and counselors, not hard-to-find researchers.

Students admitted to Knox are scholastically well above average: about half of Knox freshmen in 1975-76 ranked in the upper 10 per cent of their high school graduating classes.

Lake Forest College Lake Forest, IL 60045 (312) 234-3100, ext. 243





Enrollment 1974-75

Total: 1010 Men: 540

Men: 540 Women: 470

Calendar 3-2-3 Plan

Admissions Tests Required S.A.T. or A.C.T.

Admissions Interview Encouraged, but not required

Costs 1975-76 Total: \$4830

> Tuition and Fees: \$3530 Room and Board: \$1300

Lake Forest College is committed to the development of creative individuals who will live lives of leadership and service. The College has chosen to be a small community where close personal relationships exist among 87 full-time faculty and approximately 1,050 students. More than 75 per cent of the faculty hold the Ph.D. degree. The College maintains a faculty-student ratio of approximately 12-1. The diverse student body represents 40 states and 19 foreign countries.

Founded in 1857, Lake Forest College is located on 107 wooded acres in the residential community of Lake Forest, less than a mile from Lake Michigan and 32 miles north of Chicago. The location of the College in the Chicago metropolitan area means that internships and field research projects are important elements of the academic program. To facilitate such experiences the College's seven-week Winter Term allows students to take program-related jobs or pursue individual research.

Flexibility and self-determination also highlight the curriculum. A B.A. degree is offered after 32 courses are successfully completed from among the traditional department majors (or one of nine interdisciplinary majors). In 1974 Lake Forest pioneered the concept of undergraduate institutes with the inauguration of the Robert E. Wood Institute for Local and Regional Studies. This Institute, the first of several planned at the College, explores the social, economic and political problems of expanding urbanization.

Lawrence University Appleton, WI 54911 (414) 739-3681, ext. 332





Enrollment 1974-75

Total: 1355

Men: 673 Women: 682

Calendar

Three terms, ten weeks each

Admissions Tests Required S.A.T. or A.C.T.

Admissions Interview
Encouraged, but not required

Costs 1975-76 Total: \$4440

Tuition: \$3255

Room and Board: \$1185

Research and independent study are encouraged at Lawrence University. Students may take advantage of the opportunities and the facilities on the Lawrence campus to design and conduct investigations in a variety of areas. One recent scientific study conducted by three freshmen women showed a significant decrease in ovulation in frogs treated with tetrahydrocannabinol, as compared with control animals.

A highly qualified faculty, 95 per cent of whom hold the Ph.D. or the highest degree in their field, work closely with students, and staff outstanding programs in the physical sciences, social sciences, and the humanities. Students may choose among 22 different majors. In addition, the University's Conservatory of Music and theatre-drama and art departments provide instruction in the fine arts and enhance life at Lawrence and in Appleton, which is 200 miles north of Chicago and 100 miles north of Milwaukee.

Many students at Lawrence are on scholarship, work-study, or loan programs. In the 1974-75 academic year, Lawrence provided financial aid based on need to more than 600 students.

Macalester College St. Paul, MN 55105 (612) 647-6357





Enrollment 1974-75

Total: 1748

Men: 851 Women: 897

Calendar 4-1-4 Plan

Admissions Tests Required S.A.T. or A.C.T.

Admissions Interview Recommended

Costs 1975-76 Total: \$4250

Tuition: \$3000

Room and Board: \$1250

Chartered by the Minnesota Legislature March 5, 1874, Macalester last year entered its second century of social concern and commitment to individualism.

Members of the student body represent a wide range of geographic, economic, ethnic and religious backgrounds, and pursue their individual educational goals through an outstanding curriculum which includes 23 liberal arts majors, interdisciplinary studies, and individually designed programs. The Ph.D. degree is held by 73 per cent of the Macalester faculty.

Macalester's 50-acre campus is located in a residential area of St. Paul, midway between downtown Minneapolis and St. Paul itself. Cultural opportunities of the Twin Cities, internships, volunteer community projects and cooperative exchange programs with other colleges and universities supplement the classroom experience. Since 1960, fourteen new buildings have been constructed, including a fine arts center and two science buildings.

Monmouth College Monmouth, IL 61462 (309) 457-2131





Enrollment 1974-75

Total: 750

Men: 459 Women: 291

Calendar 3-3 Plan

Admissions Tests Required S.A.T. or A.C.T.

Admissions Interview
Recommended

Costs 1975-76 Total: \$4040

Tuition: \$2840

Room and Board: \$1200

At Monmouth, efforts to achieve excellence in teaching are entirely directed toward providing the opportunity for each student to achieve the maximum individual growth of which he or she is capable—academically, socially, spiritually, morally, and physically. The College seeks students for admission who can both profit from, and contribute to, the total educational program of the College.

A Monmouth education is an individual experience, its breadth and extent limited only by the willingness of students to learn from a broad range of major fields of study, independent study programs, work experience, volunteer programs, internships, off-campus programs, and a broad array of social and cultural activities.

Monmouth's residential campus of 750 students and 100 faculty and staff members includes young men and women from over 25 states and 7 foreign countries. The Monmouth campus is located 180 miles southwest of Chicago, and 40 miles southwest of Moline. The emphasis on individual development at Monmouth makes the College an ideal setting for launching a mature and satisfying career in the health sciences.

Ripon College Ripon, WI 54971 (414) 748-8102





Enrollment 1974-75

Total: 950

Men: 530 Women: 420

Calendar Semester Plan

Admissions Tests Required S.A.T. or A.C.T.

Admissions Interview Recommended

Costs 1975-76 Total: \$4150

> Tuition and Fees: \$3010 Room and Board: \$1140

Ripon, a small, independent, coeducational college of the liberal arts and sciences founded in 1851, has retained the thoroughly tested principles of liberal education while developing innovations which make learning enjoyable, challenging, and rewarding. For well over a century Ripon graduates have gone on to satisfying and responsible careers in virtually every profession and vocation.

Ripon students come from 45 states and 20 foreign countries, and from diverse social, ethnic, racial and religious origins. Faculty members—70 per cent of whom hold the Ph.D.—are committed to teaching and advising above all other scholarly or professional activities. Since all faculty members teach both introductory and advanced courses, and since the student-faculty ratio is only 12-1, students can work closely with outstanding teachers from the beginning of their college careers. More than 70 per cent of the classes have fewer than 20 students.

Ripon also offers a full complement of extra-curricular activities and counseling services. Thus a Ripon education can embrace all aspects of a young person's development.

"As technical advances continue their impressive pace, practitioners of medicine and of nursing must include the new technologists as full-fledged members of the health team, recognizing their special talents and skills as new weapons in the conquest of disease."

James A. Campbell, M.D., President



Admissions

Admission to Rush University is open to qualified students regardless of sex, race, religion or national origin.

Undergraduate Admissions

Students interested in the undergraduate nursing or medical technology programs are encouraged to submit applications to the affiliated colleges of their choice soon after the beginning of their senior year in high school. A college preparatory program in high school which includes chemistry and biology is the best preparation for enrollment in any of the affiliated colleges.

Each college has its own entrance requirements. A student accepted at an affiliated college for the Rush program will file an *Intent to Register* form with the College of Nursing and Allied Health Sciences to formalize participation in the program. The student's academic progress will be monitored by both Rush and the health careers advisor on the affiliated college campus. All candidates for admission must provide evidence of good physical and mental health and a health form is to be submitted prior to registration at Rush. Students meeting the objectives of the pre-health curriculum and obtaining the approval of both the health careers advisor and the Dean of the College of Nursing and Allied Health Sciences will move to the Rush University campus to pursue the final two years of the program.

Due to limited enrollment, students already enrolled in one of the affiliated colleges in another program and students desiring to transfer to an affiliated college for the Rush program must be approved by the health careers advisor and the Dean of the College of Nursing and Allied Health Sciences.

Applications may be obtained by writing to the Director of Admissions of any of the affiliated colleges.

Transfer Applicants

The College of Nursing and Allied Health Sciences also considers a limited number of transfer applicants at the third year level, in addition to students who complete the pre-health curriculum at an affiliated college. Selection is competitive and only the most qualified applicants will be accepted. Only those spaces not filled by Rush students from affiliated colleges will be available for transfer students. Many Rush transfer applicants have been registered nurses or college graduates as well as students who have attended non-affiliated colleges.

All applicants must have satisfactorily completed the pre-health curriculum at an accredited college or university. Rush University does not offer the pre-health curriculum on its campus. No transfer credit is awarded for required course work in which the student earned less than a "C" grade. Required courses should be taken for a grade rather than a pass-fail option.

Pre-Health Curriculum

Courses	Quarter Hours	
Chemistry, Inorganic	5-6	4
Chemistry, Organic	5-6	4
Human Anatomy and Physiology	10-12	8
Microbiology	5-6	4
Statistics, Introductory	4	3
Behavioral Sciences (Growth and Development is required; other co- should be in Psychology, Sociolog and Anthropology)		12
Electives	38-43	* 25*
T	otal 90	60

^{*}Candidates for the Medical Technology Program must complete 20-24 quarter or 16 semester hours of Chemistry, including Quantitative Analysis, with a corresponding reduction in elective hours. Growth and Development is not required for Medical Technology students.

Transfer applicants apply directly to the College of Nursing and Allied Health Sciences. It is advisable to apply early in the academic year preceding the intended year of matriculation. Guidance in course selection is available through the Admissions Office at Rush.

Applications for transfer students may be obtained from:

Director of Admissions
College of Nursing and Allied Health Sciences
Rush University
1743 West Harrison Street
Chicago, Illinois 60612
Telephone: (312) 942-5823

A non-refundable application fee of \$25 must accompany the application, as well as transcripts from high school (including test scores), and from all colleges, universities or nursing schools attended, and three recommendations. A health form must be submitted prior to registration.

When the application is complete, all items are reviewed and evaluated. If required course work is still in progress, an offer of acceptance is contingent upon satisfactory completion.

Applications for undergraduate nursing admissions are to be completed by April 15; beyond this date, students must seek admission through the Admissions Committee.

Advanced Placement

Registered nurses who have completed the pre-health curriculum and have been accepted by the College are eligible for the advanced placement examination program. Credits earned in previous nursing courses cannot be counted toward the 90 quarter hours required for the pre-health curriculum.

R.N. candidates for advanced placement may challenge required coursework for a specific quarter by successfully completing the following examinations in the sequence indicated:

- 1. Examination in BEHAV 301—Advanced Behavioral Science I; then, if successful:
- 2. Examination in NURSG 311—Seminar I; then, if successful:
- 3. Clinical Challenge Examination.

The same sequential testing format will be followed for each quarter of work challenged. Clinical competencies for all quarters successfully challenged will be tested simultaneously. A candidate successful in all three examinations will receive credit for 12 or 13 quarter hours. Credit for up to three quarters may be granted in this manner. In order to receive the Bachelor of Science degree a minimum of three quarters must be spent in academic residence at Rush University.

College graduates with degrees in other fields may take the advanced placement examinations in the field of their degree for the science course offered each quarter (e.g., BEHAV 301, BIOSC 301), but must enroll in the Seminar and Practicum for the quarter.

Students interested in taking the Advanced Placement examinations should contact the Director of Admissions for a schedule of dates and fees.

Graduate Admissions

An application and recommendation forms for both the graduate nursing and clinical nutrition programs may be obtained by writing:

Director of Admissions The College of Nursing and Allied Health Sciences Rush University 1743 West Harrison Chicago, Illinois 60612

All factors are taken into consideration when evaluating each student's application. Students are not necessarily excluded or accepted into a program because of deficiencies or proficiencies in any one area. An applicant not meeting regular admissions requirements may, at the discretion of the Graduate Admissions Committee, be offered enrollment as a special student as defined below.

The graduate program recognizes three categories of students:

- 1. Regular students, who have been accepted for admission to the master's degree program;
- 2. Special students, who have not been accepted to the degree program but have permission to enroll in specific courses for academic credit (there is a limit of two courses in this category);
- 3. Auditors, who have obtained permission to attend a course but are not seeking academic credit (no academic grade is reported).

Applicants to the graduate programs in nursing and clinical nutrition should make certain that the following material is on file at the College of Nursing and Allied Health Sciences at least four weeks prior to the beginning of the term of expected matriculation:

- 1. completed application;
- 2. \$25 application fee;
- 3. three personal recommendations;
- 4. official transcripts of all graduate and undergraduate work;
- 5. results of the Graduate Record Examination;
- 6. an interview with the coordinator of the appropriate field of study at Rush;
- 7. evidence of good health (a health form must be submitted prior to registration).

Clinical Nutrition

Applicants to the graduate program in clinical nutrition should have completed a baccalaureate degree from an accredited college in one of the fields of foods and nutrition, dietetics, biochemistry, biology or nursing, and the following courses:

Courses	Quarter Hours	Semester Hours
Chemistry, Inorganic, Organic		
and/or Biochemistry	16-18	12
Human Anatomy and Physiology	10-12	6-8
Microbiology	5-6	3
Statistics, Introductory	4	3
Human Nutrition	10-12	8
Nutrition in Disease and/or Diet Therapy	5-6	3-4
Behavioral Sciences	16-18	12
Economics	5-6	4
Total	71-86	51-54

Evidence of registration as a dietitian is preferred, but not required.

Nursing

Admission to the program leading to the Master of Science degree in nursing assumes that the applicant has, or within one year will have, a baccalaureate degree in nursing from an approved program and a "B" average, or a 3.0 grade point average on a scale of 4.0.

A person seeking admission who is licensed in at least one state as a professional nurse and has completed a baccalaureate degree in a field other than nursing must fulfill all other requirements and must also take proficiency examinations in nursing prepared by the College of Nursing and Allied Health Sciences faculty. These tests assist the faculty in evaluating nursing preparation. Information regarding these examinations may be obtained from the Admissions Office.

An applicant who receives unacceptable scores on the proficiency examination but meets all other admission requirements may enroll as a special student for independent study in areas identified. Successful completion of this independent study makes the applicant eligible for admission as a regular student. No credit toward a degree is earned through independent study.

Students interested in Fall matriculation should apply by April 15.

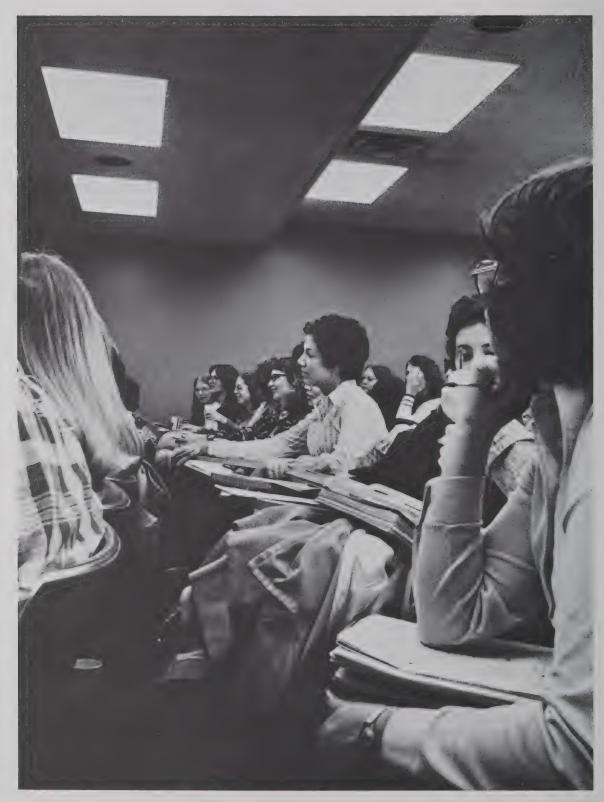
International Students

Rush University welcomes students from other countries. Every effort is made to help the foreign student adapt to life in the United States.

Since instruction at Rush is in English, proficiency in written and spoken English is required. The Test of English as a Foreign Language (T.O.E.F.L.) must be submitted if English is not the applicant's native language. Any evidence in support of the application must have an authorized English translation.

Graduate applicants from other countries must successfully complete the proficiency examinations of the College of Nursing and Allied Health Sciences to determine skills and knowledge of subject matter.

Rush University may educate foreign students only by permission of the United States Justice Department, Immigration and Naturalization Service. Form I-20 will be issued at the request of the student only when an offer of admission is made. Students must be able to finance their entire education, since permission to work is seldom granted by INS.



Expenses

Expenses listed in this section apply to third and fourth year students of the undergraduate programs and all graduate programs. Expenses for the first two years of undergraduate study will depend upon tuition, fees, room, board, and other expenses at the affiliated college attended.

A full-time, unmarried student at the College of Nursing and Allied Health Sciences may expect the following typical yearly expenses:

Tuition	\$2580
Activity fee	30
Room and meals	1290
Books and uniform	s 240
Personal expenses	660
Total	\$4800

Tuition: Full-time students taking from 12 to 16 credits are assessed \$860 per quarter or \$2580 per year. Part-time students taking from 1 to 11 credits are assessed \$75 per credit.

Activity Fee: A student-governed activity fee of \$10 for full-time students and \$5 for part-time students may be assessed each quarter at the discretion of the Student Steering Committee.

Room and Meals: Since students in academic residence at the Rush University campus may live in a variety of settings, expenses will vary. Expenses for those living in the residence halls at Illinois Institute of Technology range from \$1250 for a double room without air-conditioning to \$1540 for an air-conditioned single room. Meals are included in the fee.

Books: Books and supplies such as uniforms average between \$50 and \$80 each quarter.

Personal Expenses: Personal expenses typically include transportation, clothing, and entertainment. Commuting students should plan on about one dollar per day for public transportation or parking in the Medical Center garage.

Late Registration: Registration for the next quarter is conducted at announced time periods about the fifth week of the quarter. Late registrants will be assessed an additional \$20.

In addition, a \$50 enrollment deposit is required of all students (including affiliated students) accepted for entrance in fall, prior to matriculation. This assures a place in the entering class. This deposit is non-refundable and applies toward payment of the first quarter tuition.

Deferred Tuition Payment

Tuition is due and payable in full at the time of registration or prior to the first day of classes. Students making deferred payments may do so only by special arrangement with the Office of Financial Affairs, and are required to pay a deferred payment fee of \$15 each quarter.

Refunds

Official withdrawal from a course, or from the College, entitles a student to a refund of tuition according to the schedule listed below.

A student may receive a 100 per cent refund, if withdrawal is during the first calendar week in which classes begin.

Second week—80 per cent refund Third week—60 per cent refund Fourth week—40 per cent refund Fifth week—20 per cent refund After fifth week-no refund

All other fees charged are non-refundable.

Policies governing financial aid for undergraduate students in the pre-health curriculum at an affiliated school are determined by the affiliated college attended. A variety of financial aids are available to students at affiliated campuses.

The Director of Financial Affairs of Rush University helps students enrolled at the Rush University campus who require financial assistance through a combination of scholarships, grants, loans and College work-study programs. Financial aid is awarded on the basis of need as assessed by analysis of each student's financial requirements by the Director of Financial Affairs and by the College Scholarship Service (CSS) for undergraduates, or the Graduate and Professional School Financial Aid Service (GAPSFAS) for graduate students.

All students requesting aid from Rush or requesting the Director of Financial Affairs to certify expenses to outside agencies must submit a financial statement form to CSS or GAPSFAS. The form, obtainable from most college financial aid offices, should be submitted no later than May 15 of the year of matriculation. The code number for the College of Nursing and Allied Health Sciences, 3262 for undergraduate students and 3263 for graduate students, must be included on the application.

The following criteria must be fulfilled in order to be considered for classification as an independent or emancipated, self-supporting student: the student must submit a notarized statement that he or she has not been claimed as a dependent in the prior tax year, will not be for the year in which aid is sought, and has not lived with a parent or guardian during the academic year preceding the year for which aid is sought.

Alumni Association Student Scholarship

The Rush Presbyterian St. Luke's Nurses Alumni Association annually awards a scholarship to a selected junior student in the undergraduate nursing program of the College of Nursing and Allied Health Sciences.

Fisher Scientific Company **Scholarship**

The Fisher Scientific Company scholarship of \$2000 will be paid in equal installments for each of the terms of the junior and senior years of the medical technology program. To be eligible, the student must be

Financial Aid

a permanent resident of the United States, in need of financial assistance, have completed the first term of the sophomore year, and sign a statement of intent to earn a baccalaureate degree in medical technology.

Florence D. Hagenah Fund

This fund was established in memory of Florence D. Hagenah by a gift from her husband, William J. Hagenah. A prominent lawyer, Mr. Hagenah was a Trustee of Rush Medical College for thirty years before becoming a Life Trustee of Rush-Presbyterian-St. Luke's Medical Center in 1969. The fund will be used as a nursing scholarship endowment, and will provide an annual award to a deserving and worthy nursing student in the College of Nursing and Allied Health Sciences. The selection of the student will be based on character, scholastic attainment and promise of future achievement in a professional nursing career.

Illinois Guaranteed Loan Program

The Illinois Guaranteed Loan Program guarantees student loans made by commercial lenders. The Federal government will pay the interest on the loans if the University certifies the need for the loan. Students should apply directly to a lending institution. Applications may be obtained from the Office of Financial Affairs at any Illinois college, and from most commercial banks.

Illinois Medical Technology Association Scholarship

The Illinois Medical Technology Association (IMTA) scholarship of \$300 is awarded yearly to a medical technology student in either the sophomore, junior or senior year of college work. The scholarship is awarded by a selection committee of IMTA to the student on the basis of character, financial need, academic aptitude, and vocational promise.

Illinois State Scholarship Program

Awards are made by the Illinois State Scholarship Commission to students who have been selected as State Scholars on the basis of academic achievement and financial need. Only students who have completed fewer than 225 quarters hours or have not received the baccalaureate degree are eligible. Applications may be obtained from the Director of Financial Affairs at any college in Illinois or from:

The Illinois State Scholarship Commission

Box 607

Deerfield, Illinois 60015

Other Scholarships

Nursing scholarships are available through many community agencies. Applicants are encouraged to seek these sources of financial help.

"We want to produce scientifically trained nurses who are also humanists. The professional excitement of Rush University should help generate interest and commitment on the student's part, to the ultimate benefit of the patient."

Luther Christman, Ph.D., Dean



















The Campus

The College of Nursing and Allied Health Sciences is located on the campus of Rush University at Rush-Presbyterian-St. Luke's Medical Center on Chicago's near west side. The 16-building Medical Center complex includes: Presbyterian-St. Luke's Hospital; Health Center clinics; the Marshall Field IV building, an out-patient mental health facility; research buildings, where more than \$5 million is budgeted each year to carry out basic and clinical investigations; academic facilities for Rush Medical College and the College of Nursing and Allied Health Sciences; a professional office building; apartment buildings; and the Laurence Armour Day School for children of employees and students. The academic facility and the Johnston R. Bowman Health Center for the Elderly are scheduled for completion late in 1976. In addition to providing older people with short-term restorative care, comprehensive ambulatory services, and residential apartments, the Johnston R. Bowman Center will serve as a clinical setting for professional training in gerontology and geriatrics.

The activities of the College of Nursing and Allied Health Sciences are currently centered in Schweppe-Sprague Hall. The building houses new laboratories for basic and clinical sciences, lecture rooms, classrooms, and student lounges. Rush University administrative offices and the bookstore are on the first floor.

The Rush Library, which serves the entire University campus, is the oldest medical library in the City of Chicago and is located in the Rawson Building. It is administered by a staff of professional medical librarians. The Library has approximately 62,000 volumes, subscribes to 750 periodical titles, borrows documents from inter-library loan, and processes MEDLARS and MEDLINE requests for patrons. New monographs and reference books are acquired at a rate of over 2,000 each year. The Library also has an outstanding collection of rare medical books that is available 78 hours a week for research and study. The libraries of Illinois Institute of Technology are also available to Rush students.

New Academic Facility

In autumn, 1976, the new Rush University academic building will be open for occupancy. The structure will be the hub of activity of Rush University and will accommodate large class activities, small group seminars and individual tutoring. It will have direct internal access to the Professional Building and patient care and research facilities. Involvement of students with faculty and staff at these adjacent facilities is an integral element of the academic programs at Rush.

Plans for the new building include a large multi-discipline laboratory, surrounded by 20 unit laboratories. Each unit will house 11 individual student stations for basic science studies. A separate gross anatomy laboratory is designed on the same modular concept. A central prosection area and model room will be accessible to 15 dissecting modules, each with five tables. Two 150-seat lecture halls will utilize materials and services of the Center for Educational Resources. The Center will include a Learning Resource Laboratory equipped with audio-visual study carrels for review of material learned in classes and seminars. When the Rush Library is moved to the new building its capacity will expand to 100,000 volumes and it will be

able to increase services to the staff, faculty and students of the entire University and Medical Center.

Presbyterian-St. Luke's Hospital

Students of Rush University primarily receive their clinical training at Presbyterian-St. Luke's Hospital, a voluntary, not-for-profit hospital with a professional staff of 450 physicians and scientists and 250 house staff receiving graduate medical education in over 30 specialty areas. Each year over 28,000 patients are admitted to the Hospital, using 864 beds, and 30 bassinets. Outpatients make over 122,100 visits per year to 26 Health Center clinics and the Emergency Room. By tradition each patient participates in the teaching programs of Rush University. The Hospital is directly across the street from Schweppe-Sprague Hall.

Classes in advanced behavioral, biological and clinical sciences are taught in Schweppe-Sprague Hall, in various patient care areas of the Hospital and the Health Center, and in the community, by faculty who are practitioners as well as teachers.

In clinical settings, nursing students are required to wear white uniforms, in a style of their choice. When nursing students are in a community health setting, they wear blue uniforms so that they will easily be identified to the public as community health nurses. Regulations regarding these uniforms may be obtained from the faculty of Community Health Nursing.

Clinical nutrition and medical technology students wear white coats in the clinical setting.

Affiliated Hospitals

Affiliated hospitals and a community health center in Illinois are cooperating with Presbyterian-St. Luke's Hospital to provide students and house staff with opportunities to participate in the delivery of health care in a variety of socio-economic settings in urban and rural areas.

Participating institutions are:

Bethany Brethren/Garfield Park Hospital, Chicago: 197 beds

Central DuPage Hospital, Winfield: 237 beds

Christ Hospital, Oak Lawn: 615 beds

Community Memorial General Hospital, La Grange: 237 beds

DeKalb Public Hospital, DeKalb: 103 beds

Galesburg Cottage Hospital, Galesburg: 234 beds

Mt. Sinai Hospital Medical Center, Chicago: 479 beds

Swedish Covenant Hospital, Chicago: 235 beds West Suburban Hospital, Oak Park: 276 beds

Mile Square Health Center, Chicago: over 20,000 patients registered.

Housing and Transportation

An agreement between the College and Illinois Institute of Technology allows Rush students to apply to live in residence halls on that campus.

The residence halls for both male and female students provide central dining rooms, lounges, study rooms, laundry, and storage facilities. Apartments, ranging from efficiency to three bedrooms, are available for married students and graduate women students.

This arrangement provides students with an opportunity to participate in the cultural and social activities at IIT. Transportation for students commuting between the IIT campus and the Rush University campus is provided on a limited basis.

Rush students may also apply to live in Herman Crown Center, the residence hall of Roosevelt University. Herman Crown Center is located in downtown Chicago within 20 minutes of Rush by public transit. It is a co-educational facility with fully furnished double rooms.

Off-campus housing of the student's choice is available in Chicago and suburbs. Limited housing is available on the Rush campus; written requests should be directed to the Office of Student Affairs.

Students are encouraged to make all housing inquiries early to:

The Office of Student Affairs

The College of Nursing and Allied Health Sciences

Rush University

1743 West Harrison Street

Chicago, Illinois 60612

Public transportation to and from the Rush campus is excellent. The "Congress A" train, from downtown Chicago and western suburbs such as Oak Park, stops two and one-half blocks northwest of the campus at the "Medical Center" stop. The "Douglas B" train, from downtown, stops at "Polk Street," at the southeast corner of the campus. Chicago Transit Authority buses also stop at the campus.

Students who commute by automobile may park in the Medical Center parking lot at the northeast corner of Ashland and Harrison at no cost or in the Medical Center garage at a modest daily fee. Free parking is available at Illinois Institute of Technology.

Health services are provided by ANCHOR, a health maintenance organization, and Blue Cross hospitalization insurance. ANCHOR is oriented toward illness prevention; it provides ambulatory care designed to reduce hospital utilization. All students are covered by ANCHOR, but during any period of time in which a student is not enrolled at Rush University ANCHOR coverage is not in effect. ANCHOR membership is optional during summer quarter, but may be maintained at a cost to the student by notifying the Office of Financial Affairs prior to the end of the spring quarter.

Blue Cross provides coverage for hospital costs (including emergency room costs). The College requires that each student have Blue Cross coverage or its equivalent from the date of matriculation until graduation, including summer quarter. Prior to matriculation, students must notify the Office of Financial Affairs of their intent to enroll in the University's Blue Cross plan, or indicate alternate coverage. Students electing the University's Blue Cross plan will be

Health Services and Counseling

billed for coverage. A student's spouse and dependents may be enrolled in these programs at an additional fee.

Students not actively enrolled in courses at Rush are ineligible for ANCHOR or Blue Cross coverage.

A professional counselor is available to assist the student in education and vocational planning, emotional and social adjustment, finance, marriage and family, reading and study, or in any other area in which greater self-understanding is sought.

Social and Cultural Activities

With over 500 students currently on the Rush University campus, there are a variety of extracurricular activities. The Office of Student Affairs works with the Student Steering Committee to plan organized activities.

The Steering Committee is an elected group of students whose purpose is to provide appropriate representation for all students in the College. The Steering Committee acts as a liaison with faculty, students and administration for the mutual exchange of ideas, insures that students will have representation in formulating policies and procedures related to the needs of students, and provides coordination in planning and implementation of extracurricular programs and activities.

Chicago's Loop area with its many opportunities in art, music, drama, films, and museums is located approximately two miles from campus. It is easily reached by car or by public transportation. Outstanding attractions in Chicago include the Chicago Symphony Orchestra, the Lyric Opera, the Art Institute, the Museum of Science and Industry, the Field Museum of Natural History, the Shedd Aquarium, and the Adler Planetarium.

Rush students at Illinois Institute of Technology may join sororities and fraternities if they so desire. Some of these groups have their own residences.

Lake Michigan provides an ideal site for a variety of activities such as boating, fishing, bicycling along the lakeshore path, and sunning. During the winter months, ice skating and cross-country ski enthusiasts have access to Chicago's expansive parks.

A wide variety of physical education facilities at IIT are open to Rush students. Students may also purchase a recreation pass for use of physical education facilities at the University of Illinois Chicago Circle Campus. Students may purchase either a \$30 (three-quarter) or a \$40 (four-quarter) pass, which provides access to bowling lanes, billiard tables, table tennis, swimming pool, handball courts, and weight and exercise rooms. Arrangements for a pass are made in the Office of Student Affairs.

Nurses Alumni Association

The Rush Presbyterian St. Luke's Nurses Alumni Association is an active organization with the following goals: to unite the graduates of Rush University, Presbyterian-St. Luke's Hospital School of Nursing, the School of Nursing of the Presbyterian Hospital, and St. Luke's Hospital School of Nursing, for mutual assistance, protection and preservation of fellowship; to promote the professional and educational advancement of nursing; and to support the interests of the Rush University programs in nursing.

Over two thousand graduates of these schools of nursing are active members of the Alumni Association. Each April graduates return at Homecoming to tour the facilities and to learn what is happening in the Medical Center. From 1888 through 1968 there were 7,221 graduates of the diploma programs of the various schools. Many of them have served with distinction around the world.

Many alumni support the Rush University nursing programs financially through the Golden Lamp Society, which provides for gifts to the College.

The Association also gives an annual award to the outstanding nurse graduate of the College of Nursing and Allied Health Sciences.







"The planners of Rush University were convinced that the issue at stake is the quality, not the quantity, of health manpower. Competent persons are more likely to be innovative and use the resources of the system more wisely than persons with lesser capability. In addition, competent persons probably will demonstrate a greater degree of responsibility and accountability when dealing with problems of care."

Luther Christman, Ph.D., Dean





Academic Policies

Credit Hours

The quarter hour is the unit used by the College of Nursing and Allied Health Sciences for determining credit for courses taken at the Rush University campus. One quarter hour generally represents a lecture or seminar meeting one hour each week, or a laboratory or clinical experience of two to three hours per week (sometimes more) for the ten weeks of the quarter. An examination for each course generally is given during the eleventh week.

Full time students will carry a course load of 12 to 17 quarter hours each quarter. Graduate students are limited to 16 hours.

Outstanding students may petition the Dean to register for additional courses. Written approval is required. Degree candidates must also obtain written permission for less than full-time course work.

Credit by Examination

Certain courses may be challenged by a student possessing knowledge or skills in a particular area. The advanced placement program is available for entering undergraduate students with a previous degree or Registered Nurses. Credit for courses earned in this manner will be noted on the academic record and will meet graduation requirements, but in some cases may not reduce the time required for graduation. Requests for taking an examination for credit may be initiated in the Office of Admissions.

Credit for concurrently enrolled course work is considered in lieu of a Rush course for graduate students and will not necessarily replace the allowable nine credits of transfer work.

It is the responsibility of the student to provide proof of successful completion of off-campus courses by official transcripts. Proof of successful completion of work at IIT will be provided by the Office of the Registrar at IIT.

Transfer of Credit

Undergraduate courses taken at an accredited college or university which fulfill the pre-health curriculum requirements may be applied toward the baccalaureate degree in nursing or medical technology at Rush. Upper division work done at another institution may be accepted to fulfill elective credit only.

Graduate level courses taken at any recognized institution may be applied to the Master of Science degree at Rush, subject to the approval of the major advisor. Credit in excess of nine quarter hours requires approval by the Assistant Dean for Graduate Programs.

Part-Time Study

Undergraduate students normally must plan on full-time course work.

Graduate students may enroll for courses on a part-time basis.

However, all prerequisites for a specific course must be met before admission to the course. Part-time graduate students must complete degree requirements within three years. Any special cases may be referred to the program coordinator for action.

Off-Campus Enrollment

Courses at IIT are taught on contract for Rush University. For upper division students in either baccalaureate program, the grade assigned by the instructor and the appropriate grade points are recorded on the academic record as Rush courses.

Courses taken concurrently at institutions other than IIT and acceptable to the appropriate dean may count toward graduation requirements, but will be documented on the academic record as concurrent enrollment. Grades received and number of credits transferred to Rush will not affect the grade point average at Rush.

Registration

Registration for a new term is normally done in an announced pre-registration period during the preceding term. The last day to enter any course is on Monday of the second week of each quarter. Registration, dropping and adding courses, and withdrawal from school must be done on forms provided by the Office of the Registrar. Students registered in a course but failing to participate will be given a grade of "F" or "N."

Grades are recorded on the student's permanent academic record in the Office of the Registrar. Official copies of the record are available only at the request of the student.

The grade point average is determined by dividing the number of grade points earned by the number of quarter hours of credit attempted. Only grades A, B, C, D, and F are computed.

Undergraduate Grading System

Students enrolled in the pre-health curriculum at an affiliated school follow the grading system in use at that institution.

Upon enrollment for upper division work at the Rush University campus, only upper division course work will count in the determination of the grade point average.

The following grades are used to report the quality of upper division work:

Grade	Quality	Grade Points
A	Excellent	4
В	Good	3
C	Satisfactory	2
D	Minimal passing	1
F	Failure	0
P	Passing	
N	No passing	
I	Incomplete	_
W	Official withdrawal	_
WP	Withdrawal passing after fifth week	
WF	Withdrawal failing after fifth week, no penalty	
WN	Withdrawal after fifth week, not passing (applies only to courses taken on a P/N basis).	_

A grade of "P" or "N" is given for elective courses at the discretion of the instructor and in some cases when the student petitions, not later

Grades

than the first week, to take the course on a "P/N" basis with the instructor's permission.

The grade of "I" is normally given only when circumstances beyond the control of the student prevent completion of course requirements. Students receiving a grade of "I" are responsible for finding out from the instructor the exact work required to remove the Incomplete. In the case of a required course, a letter grade must be received by the end of the next quarter the student is enrolled, or sooner, at the discretion of the instructor. The appropriate grade for work completed or an "F" or "N" grade if the work was not completed will be reported. A grade of Incomplete in an elective course will automatically revert to an "F" or "N" grade unless a change of grade is received by the Registrar within one calendar year.

Graduate Grading System

Grades used to report the quality of a graduate student's work are:

Grade	Explanation	Grade Points
A	Performance at a high level	4
В	Performance at a level necessary for a graduate degree	3
С	Performance not consistently at the level needed for a graduate degree (a student receiving a grade of C in a Seminar and Practicum must repeat the course)	2
D	Barely passing	1
F	Unsatisfactory performance. Such a course cannot be used to fulfill a graduate program requirement; the course must be repeated	0
I	Incomplete work	
W	Withdrawal prior to midterm	
WP	Withdrawal after midterm. The quality of work was passing at the time of withdrawal	
WF	Withdrawal after midterm. The quality of work was failing at the time of withdrawal	

A course in which a "C," "D," or "F" has been assigned may be repeated only once. The grade for the repeated course replaces the first grade in the cumulative grade point average.

Graduate students have the option of requesting an Incomplete from the course director. An "I" grade not removed by midterm of the next quarter will revert to a final grade as determined by the course director.

Students are fully responsible for all material presented in class sessions. Faculty will not be available for students who miss class or are late for class. Students are expected to be in all seminar and clinical practice periods, and are fully responsible for all content presented therein. When illness or other special circumstances prevent attendance, the student must inform the instructor in advance when possible, in order to plan for meeting objectives on an individual basis.

Absences

Student Progression

The faculty reserves the right to request the withdrawal of any student whose conduct, physical or mental health, or performance, demonstrates lack of fitness for continuance in a health profession.

Undergraduate Student Progression

Undergraduate students will be considered in good standing at Rush University unless placed on Academic Probation by the Committee on Progress and Promotion. Progression in the program will be determined by that Committee.

Academic Probation is assigned to any student whose cumulative grade point average falls below 2.0. A student must raise the cumulative grade point average to 2.0 within two quarters or be dismissed for unsatisfactory progress. Students on academic probation will not be permitted to represent the University on any student organization or committee or hold office in any student organization.

Quarterly Probation is assigned to any student obtaining less than 2.0 in any quarter even though the cumulative grade point average is above 2.0. Students failing to receive 2.0 the next quarter in attendance may be subject to dismissal.

Academic Warning may be assigned to those students not performing to the expectations of a student in the health professions. Terms of the warning will be stated in writing so that the student and the faculty advisor know exactly what must be done to improve academic standing. Students not meeting the terms set by the academic warning will be subject to dismissal.

Graduate Student Progression

Scholastic standards for all graduate programs of the College of Nursing and Allied Health Sciences are determined by the individual department. Further registration may be refused if a student fails to meet these standards or does not receive a passing grade in a course in his or her major department.

Students in all graduate programs must maintain a cumulative 3.0 average in order to remain enrolled. A maximum of two (2) grades of less than "B" are permissible in courses other than the major area of study. A student receiving more than two grades of less than "B" may be required to withdraw from the program.

Only grades of A, B, or C may fulfill graduate degree requirements in the major seminars and required core courses. A student who earns a "C" in a major seminar must make special arrangements with the major advisor to repeat that work. Less than "C" in a major seminar will result in denial of further enrollment in that graduate program.

A student whose cumulative grade point average falls below a 3.0 may enroll for one quarter as a probationary student to attempt to raise his or her cumulative grade point average. Further enrollment in a graduate program of the College of Nursing and Allied Health Sciences will be denied if the grade point average is not raised in that quarter.

Requirements for Graduation

Bachelor of Science

The Bachelor of Science degree, with a major in either nursing or medical technology, requires a minimum of 180 quarter hours. This includes at least 90 quarter hours earned as a lower division student at an affiliated school, or before entrance as a transfer student. Remedial courses taken to fulfill prerequisites for special courses are not necessarily included in the 180 quarter hours needed for graduation.

A minimum of 45 quarter hours shall be spent as an upper division student in academic residence at the Rush University campus.

Candidates for the Bachelor of Science degree must earn a 2.0 cumulative grade point average in all computed upper division credits taken at Rush University and a 2.0 in all required course work in the student's major, exclusive of electives.

Participation in cap and gown at commencement exercises is expected of all graduates.

After receiving the baccalaureate degree, graduates are eligible to write the Illinois State Board Test Pool Examination for Nursing or the Registry Examination of the American Society of Clinical Pathologists for Medical Technology.

Master of Science

The Master of Science degree with a major in clinical nutrition requires a minimum of 54 quarter hours. Fifty-five (55) quarter hours are required for a major in nursing, with the exception of the clinical specialties of geriatric/gerontological nursing which requires 73 hours and community nursing which requires 82 plus a two-quarter residency.

A maximum of nine (9) quarter hours may be transferred from another college or university.

A cumulative grade point average of 3.0 is required, with no grade less than "C" in all required core courses and none less than "B" in a major seminar.

All requirements for the degree must be completed within three calendar years.

All master's degree candidates must successfully complete a comprehensive oral examination during their last quarter in residence.

Candidates for the Master of Science degree are urged to participate in the commencement exercises in June, though many will complete degree requirements prior to the spring quarter.

"Those of us in the health professions must demonstrate our adaptability with far greater imagination and responsibility than most of our fellows."

James A. Campbell, M.D., President



















Undergraduate Programs in Nursing and Medical Technology

At The College of Nursing and Allied Health Sciences, programs leading to the Bachelor of Science degree with majors in nursing and medical technology require successful completion of a pre-health curriculum at an affiliated campus, and upper division study at the Rush University campus.

The pre-health curriculum for both nursing and medical technology and individual upper division requirements for each program are described in the following sections.

The pre-health portion of the undergraduate programs is taken at an affiliated college and requires two or three years of study, depending upon the college. These years are devoted to preparing the scientific foundation upon which the practice of nursing or medical technology can be built. The first year emphasizes courses in biological, physical and behavioral sciences, with options in the humanities. The succeeding pre-health years are used to increase depth in the sciences as they relate more specifically to health fields, and to enhance personal experience by a broad choice of electives in the humanities.

Each affiliated college has a unique participation with Rush. Specific course offerings and requirements may vary from campus to campus due to curricular offerings, scheduling, and course content. Each pre-health curriculum is different, but all provide the background necessary for the professional component of the program in the final two years. The pre-health curriculum below suggests the kinds of courses which may be required before a student comes to the Rush campus:

Courses		Quarter Hours	Semester Hours
Chemistry, Inorganic		5-6	4
Chemistry, Organic		5-6	4
Human Anatomy and Physiology		10-12	8
Microbiology		5-6	4
Statistics, Introductory		4	3
Behavioral Sciences (Psychology, S or Anthropology**)	ociology,	18	12
Electives		38-43**	25**
	Γotal	90	60

^{**}A course in Growth and Development is required for nursing but not for medical technology candidates. The Medical Technology Program requires that candidates complete 20-24 quarter hours or 16 semester hours of chemistry, including quantitative analysis, with a corresponding reduction in elective hours.

Baccalaureate Program in Medical Technology

Pre-Health Curriculum

Philosophy

The contribution of medical technology to health care delivery and to the patient is primarily diagnostic. With the expansion in clinical medicine of the variety and number of diagnostic tests performed, and the intricacies of new methods and instruments used, there is a crucial need not merely for more medical technologists but for more professionals of even higher quality.

Today's professional technologists must not only develop technical expertise, but teaching and administrative competence as well. They must be able to adapt to rapid changes in the field and at the same time perform at an optimum level. As members of the health care team, medical technologists must have a basic understanding of the role of other allied health practitioners in order to function effectively and bring the best possible care to the individual and to the community. Although work in medical technology often does not place the practitioner in actual physical proximity to the patient, the technologist must nevertheless maintain a high degree of compassion and a constant awareness that the welfare of the patient is the ultimate goal.

It is the aim of Rush University to educate technologists to meet all the changing needs of laboratory medicine more effectively and with greater efficiency.

Objectives

The objectives of the program in medical technology are to provide educational experiences which will enable the student to:

- acquire knowledge and proficiency in the technical skills required in the medical technology profession;
- develop problem-solving abilities in the application of scientific theory to the clinical practice of medical technology;
- acquire the basic principles of management and teaching to assist in the supervision and education of supportive level laboratory personnel;
- appreciate the importance of continuing education as an avenue of professional growth;
- acquire an understanding of the roles of other members of the health care team and an ability to function cooperatively within the team;
- appreciate and practice professional ethics in providing quality health care to the patient and to the community.

Curriculum

Following the pre-health curriculum, upper division studies are devoted to completing the professional segment of the program leading to the Bachelor of Science degree with a major in medical technology.

The curriculum during the last two years includes didactic and practical experience in various clinical laboratory specialties. Additional courses in the program are complementary to the clinical portion and add to knowledge and capabilities which will be required as a practicing technologist.

Baccalaureate Medical Technology Program Third and Fourth Year

Third Year

Fall Quart	ter		Quarter Hours
BIOCH	301	Basic Biochemistry	4
MEDPH	311	Medical Physics I	4
MICRO	311	Diagnostic Bacteriology	3
MICRO	321	Diagnostic Bacteriology Lab	2
HCSYS	302	Dynamics of Health Care	2
			15
Winter Qu	arter		
IMMUN	301	Basic Immunology	3
MED	301	Hematology I	3
MED	311	Hematology I Lab	3
MEDPH	321	Medical Physics II	3
MEDPH	322	Medical Physics II Lab	2
STATS	301	Probability and Statistics	3
			17
Spring Qu	arter		
BIOCH	401	Clinical Chemistry I	3
BIOCH	411	Clinical Chemistry I Lab	2
IMMUN	402	Clinical Immunology	3
IMMUN	412	Clinical Immunology Lab	3
BEHAV	381	Research Methodology	3
		Medical Grand Rounds—	
		Attendance Required	No Credit
			14
Fourth Ye	ear		
Fall Quart	er		Quarter Hours
MED	401	Body Fluid Analysis	4
MED	425	Hematology II	4

435 Hematology II Lab

Elective

Practicum in Medical Technology I

2

5

0-3 15-18

MED

MEDTK

411







Winter Qu	arter		
BIOCH	421	Clinical Chemistry II	3
BIOCH	431	Clinical Chemistry II Lab	2
MEDTK	412	Practicum in Medical Technology II	5
		Electives	4-6
			14-16
Spring Qu	arter		
MEDTK	413	Practicum in Medical Technology	5
MEDTK	441	Seminar in Medical Technology	2
MICRO	411	Special Microbiology	3
MICRO	421	Special Microbiology Lab	2
		Electives	3-5
			15-17
		Sub-Total	90-97
		Pre-Health Curriculum	+90
		Minimum Required for Graduation	180

The following are suggested electives. For other elective opportunities, see the course listing in the back of this bulletin.

HCADM	301	Health Care Management
HCADM	312	Supervisory Management
MEDTK	449	Independent Study
PHYSO	311	Advanced Physiology
PPHYS	401	Pathophysiology
		or a Health Care Education Course

Baccalaureate Program in Nursing

Upon completion of the four-year program leading to the Bachelor of Science degree with a major in nursing, the graduate is eligible to write the licensure examination to become a registered professional nurse.

The goals of the program are to prepare the professional nurse with the knowledge base and intellectual flexibility to provide nursing care in a variety of current and emerging health care delivery systems, and to interact with the individual, the family, the community, and other health professionals.

The development of nursing as an applied science begins with a foundation in the basic liberal arts and sciences to provide a base for the upper division nursing curriculum at the Rush University campus. The basic behavioral and biological sciences taken the first two or three years at an affiliated school are translated during the last two years into nursing practice in the psychomotor skills lab, classrooms, seminars, and clinical practice and experiences.

A team effort, involving basic scientists, nurse-scientists, practitioner/teachers, and the student, guides the application of current nursing knowledge, and utilizes the freshest directions for change and the newest research findings. Throughout the curriculum the student is expected to become more and more self-directed and to concentrate on specific career goals through the selection of academic and clinical electives. Electives in the humanities are an integral part of the curriculum and complement the scientific and technical competencies required for professional practice.

The lifetime continuum of learning for nursing practice is acknowledged at Rush and enhanced by the availability of self-study resources and advanced studies in clinical nursing and nursing research.

Philosophy

The faculty of Rush University College of Nursing and Allied Health Sciences believe that each individual is a part of the human family; the potential for growth is inherent in each individual; the individual and his environment are dynamic interdependent systems; one is born into, lives, and dies in a social system; one moves through the life cycle within a health-illness continuum which is expressed within a socio-cultural context; and education is a life-long process which develops the potential, intellectual, and humanitarian insights necessary for functioning as a productive, creative, and contributing member of society.

The learner is a singular individual coming with a highly specific socio-cultural background, diverse life experiences, and varied . interests and values; learning is meaningful and best facilitated when based on individual variations. The members of the faculty provide students with a learning environment which enhances individual potential by encouraging inquiry and self-directed independent learning which incorporates methods of new nursing care as well as stimulating the definition and investigation of nursing problems. The liberal arts education serves to broaden perspectives in relation to man in society, and a humanistic approach to nursing care, and to foster an esthetic value for self-fulfillment. The biological and behavioral sciences serve as a foundation for understanding the

nursing process and applying theory to nursing practice. The professional education, based on scientific principles, provides knowledge, promotes skills, and encourages the development of attitudes which are essential to the functioning of the professional nurse practitioner as a generalist.

Taken together, all the elements in the philosophy are designed to enable students to grow into the professional competence necessary to function effectively.

Expertise in nursing includes an ability to work harmoniously and productively with all other members of the health team as well as contributing constructively to change in the provision of health services to society. Nursing as an applied science has responsibility for influencing health care in various dimensions: the potential for health care can be enhanced or impeded by environmental variables; the ability to cope with crisis is related to previous levels of health, and persons, as consumers of health care, ought to be participants in their care.

Objectives

The objectives of the undergraduate program in nursing are to provide educational experiences which will enable the student to:

- function as a general practitioner with a commitment to continuous learning and the improvement of nursing care;
- synthesize principles and concepts from the biological and behavioral sciences in planning, implementing and evaluating preventive, therapeutic, and rehabilitative health care for individuals and families:
- apply principles of problem-solving in designing, implementing, and evaluating health care;
- function independently and interdependently with other members of the health team in providing for continuity in the delivery of care;
- participate as an effective change agent while focusing on social and political forces as they affect the health care delivery system and the roles of nursing;
- relate the findings of research to clinical practice and explore areas for continued research;
- demonstrate commitment and accountability to health care consumers and providers;
- engage in activities which promote personal and professional development; and
- acquire a basis upon which to enter graduate study in nursing.

Curriculum

The upper division curriculum designed to fulfill these objectives consists each quarter of a set of correlated courses that function much as one course. An advanced course in either the biological or the behavioral sciences provides the core concepts for the set of courses. It is taught by a team of scientists, experts in their own subspecialties. Additional Medical Center staff are called upon to lecture on other specialized areas.

Clinical nursing faculty present related nursing concepts in the required seminar/practicum that accompanies the advanced science course. In the practicum, students spend 12 to 18 hours weekly in clinical experiences planned to provide an opportunity to apply the principles in practice. Part of this clinical time is spent learning basic nursing skills and techniques related to the seminar content in specially equipped psychomotor skills laboratories. Teaching of these skills is provided by both teacher/practitioners and laboratory personnel in order to assure competent, safe patient care. When competency is gained, the skills are applied in the clinical setting.

This scheme is followed for five quarters; each seminar and practicum assumes that students will achieve a progressively higher level of understanding and skill. (Since courses are offered only once each year, unsatisfactory performance will result in a year's delay in progress.) Each nursing student will be assigned to clinical experience in the areas of medical, psychiatric, community, obstetrical, surgical, and pediatric nursing. Clinical assignments and conferences aid students in learning the special care requirements of patients in each nursing area. Arrangements have been made with other agencies and institutions in the Chicago area so that students may have outstanding clinical training in a variety of care settings.

In the final quarter students are permitted to select an area of clinical practice for concentrated study. They are given greater responsibility for patient care, under the guidance and supervision of the teacher/practitioner.

Throughout the program, the student is guided by the Assistant Dean for Undergraduate Programs in Nursing and by faculty who serve as teacher/practitioners. The role of the teacher/practitioner is to help the student understand the application of scientific concepts to nursing practice. This unique role is filled by a practicing nurse with a master's degree in the appropriate clinical specialty. Teacher/practitioners spend part of their time as teachers, interpreting concepts, guiding clinical experiences, assigning tasks to students, and counseling them. They also are practitioners, caring for patients in a unit of the Medical Center and perhaps engaging in clinical research.

Students also take courses in pharmacology, research, professional issues and elective areas to broaden their educational experiences.

Baccalaureate Nursing Program Third and Fourth Year

Third Yea	r		Quarter
Fall Quart	er		Hours
BEHAV	301	Advanced Behavioral Science I	4
NURSG	311	Seminar and Practicum I	8
PHARM	301	Introduction to Pharmacology I	2
			14
Winter Qu	arter		
BIOSC	301	Advanced Biological Science I	4
NURSG	312	Seminar and Practicum II	8
		Elective	2-4
Spring Qua	arter		14-16
BIOSC	302	Advanced Biological Science II	4
NURSG	313	Seminar and Practicum III	8
		Elective	2-4
			14-16
Fall Quart			Quarter Hours
HCSYS	401	Sociobiological Systems	4
NURSG	411	Seminar and Practicum IV	9
HLCED	382	Introduction to Research	2*
Winter Qu	arter		15
BEHAV	401	Advanced Behavioral Science II	4
NURSG	412	Seminar and Practicum V	9
		Elective	2-3
G : 0			15-16
Spring Qua			
NURSG	431	Concentrated Clinical Studies	3
NURSG	413	Seminar and Practicum VI	10**
NURSG	434	Professional Issues Elective	1 2
			16
		Sub-Total	90
		Pre-Health Curriculum	+90
		Minimum Required for Graduation	180

^{*}Not required for class of 1976 **Nine credits for class of 1976

"We must all make ourselves learn more about patient care—how it can be delivered, not just more efficiently, but more effectively; not only more effectively, but with greater satisfaction to the patient and with greater understanding and insight by the health professionals."

James A. Campbell, M.D., President





Graduate Program in Clinical Nutrition

Philosophy

The program leading to the Master of Science degree with a major in clinical nutrition is designed to give students a thorough knowledge of clinical nutrition, expertise and confidence in health team interaction, and skills in communication and teaching.

Because the vital relationship between nutrition and health is receiving greater recognition, the role of the clinical nutritionist has expanded. New expertise, the ability to assume more significant responsibility as a member of the health care team, and the ability to contribute to the education of practicing and future health professionals is required.

The clinical nutritionist works with physicians, nurses, nurse practitioners, social workers and other health care providers, all sharing a primary concern—the patient. Effective interaction and communication between these professionals are dependent upon a broad base of common knowledge. Because Rush University has organized its academic programs on the belief that cooperative activities focused on the patient are enhanced by interdisciplinary education, students in the clinical nutrition program take courses with graduate nursing students and with medical students.

Objectives

Upon completion of the Master of Science program in clinical nutrition, the graduate will be able to:

- obtain nutritional history information and correlate it with biochemical and clinical information (including behavioral data) to evaluate the dietary and nutrient status of the patient;
- advise and recommend to the physician or primary health care provider a feasible nutritional management program for the patient;
- function as a consultant to the entire health care team—
 physicians, nurses, physical therapists, social workers, and health
 students—regarding the nutritional care of the patient;
- function as a nutrition educator and coordinator of education in nutrition for health team professionals as well as students of health professions such as medical, nursing, dietetics, nurse associate and allied health students;
- function as effective educator in nutrition for patients, their families, and community members; and
- function as a resource for nutrition information and guidance needed by the health care team, in the hospital and in the community.

Curriculum

Master's Degree Program Clinical Nutrition

Fall Quart	ter		Quarter Hours
BEHAV	501	Behavioral Dynamics	4
BIOCH	451	Biochemistry I	4
PHYSO	511	Nutritional Physiology I	3
		Elective*	1-5
			12-16
Winter Qu	ıarter		
BIOCH	452	Biochemistry II	4
HLCED	583	Clinical Investigation I	2
PHYSO	512	Nutritional Physiology II	3
PPHYS	576	Nutritional Pathophysiology I	3
		Elective	0-4
			12-16
Spring Qu	arter		
HLCED	584	Clinical Investigation II	2
NUTRI	501	Nutritional Interrelationships I	4
NUTRI	511	Seminar and Practicum I	7
PPHYS	577	Nutritional Pathophysiology II	3
*****			16
Summer C	uarter		
NUTRI	502	Nutritional Interrelationships II	4
NUTRI	512	Seminar and Practicum II	7
NUTRI	591	Independent Clinical Study	2-5
			13-16
		Minimum Required for Graduation	54

^{*}Electives must include 2 to 4 credits of Health Care Administration or Health Care Systems course work.

The program can be completed in a minimum of 4 quarters; however, some students may require 5 to 6 quarters to complete the objectives of the program and develop appropriate competencies. At the end of the second quarter, the student will be notified of the probable date of completion of the program.

Combined B.S./M.S. Degree Program

A combined B.S./M.S. program in clinical nutrition is under development by the Rush faculty. Students will spend the first three years on an undergraduate campus completing prerequisite courses for graduate study. The student will then come to the Rush University campus for two years of concentrated study and clinical work before obtaining the M.S. degree. Students may have the opportunity to pursue the first three years of study on the campus of an affiliated college.





"Nurses must begin to put into practice the individualized care they preach. Care by routines and mass task activities must be replaced by a care pattern that takes into consideration the life style of patients, moves constantly toward independence for patients; the teaching of health care to patients must reach new planes of sophistication and sensitive understanding." Luther Christman, Ph.D., Dean







Graduate Programs in Nursing

Master's Degree in Nursing

Programs leading to the Master of Science degree with a major in nursing provide the opportunity for clinical specialization in community nursing, geriatric/gerontological nursing, psychiatric nursing, oncology nursing and medical surgical nursing.

Philosophy

Building on the philosophy of the undergraduate curriculum, both the master's and the proposed doctoral programs center on nursing as an applied science which considers the life cycle of man and the systems interacting in the environment of man.

The first phase of graduate study is clinical specialization at the master's degree level. Successful completion of the requirements for the Master of Science degree in nursing indicates the student's qualification for practice as a clinical specialist. This course of study also provides the basis for continued graduate study in the doctoral program.

Objectives

The graduate program in nursing provides educational experiences which will enable the student to:

- become an expert practitioner in a clinical specialty area with a commitment to continuous learning and the improvement of nursing care;
- synthesize knowledge from the biological and behavioral sciences and apply this knowledge to clinical practice;
- critically assess and synthesize diverse clinical data into a unified meaningful theoretical framework;
- utilize research concepts and skills in planning, implementing and evaluating nursing care for individuals and families in distributive and episodic health settings;
- utilize independent study as a means of enhancing clinical skills and knowledge, and in role development in a selected specialty area;
- analyze the health care system and the nursing leadership role in the context of interacting social, economic, political, and biological systems;
- function collaboratively with other members of the health team in the delivery of health care; and
- acquire a basis to pursue doctoral study in nursing.

Curriculum

The Master of Science degree with a major in nursing requires completion of a minimum of one calendar year or 55 quarter hours of credit, exclusive of prerequisites and deficiencies. Each student is assigned an advisor who helps plan the program of study.

Core content (required course work) of the curriculum encompasses concepts of health care delivery, behavioral sciences, biological sciences and clinical investigation. Seminar-practicum courses provide individual and group focus on the student's area of clinical specialization. In the practicum, the student may choose both the practice area (psychiatric, community, oncology, medical, surgical, or geriatric) and the setting (community, acute, chronic care centers). Faculty preceptors in the student's area of specialization are constantly available.

Electives may be taken in any subject offered at the Rush University campus of the College of Nursing and Allied Health Sciences, or an affiliated school. Elective credits may be earned in a nursing specialty other than the student's major area.

Master's Degree Program Community Nursing

Fall Quart	er		Quarter Hours
BEHAV	501	Behavioral Dynamics	4
NUCOM	501	Physical Assessment	6
NUCOM	511	Community Nursing Seminar I	2
PHYSO	451	Physiology I	5
			17
Winter Qu	arter		
HCSYS	521	Systems of Health Care I	2
HLCED	583	Clinical Investigation I	2
NUCOM	502	Adult Health Concepts I	7
NUCOM	512	Community Nursing Seminar II	1
PHYSO	452	Physiology II	5
			17
Spring Qu	arter		
HCSYS	522	Systems of Health Care II	2
HLCED	584	Clinical Investigation II	2
NUCOM	503	Adult Health Concepts II	7
NUCOM	513	Community Nursing Seminar III	2
STAT	502	Biostatistics	3
			16

Summer Quarter NUCOM 504 Ob/Gyn Health Concepts 8 NUCOM 514 Community Nursing Seminar IV 2 NUCOM 521 Community Health Services 3 PRMED 503 Epidemiology 3 16 Ouarter Hours Fall Quarter NUCOM 505 7 Pediatric Health Concepts NUCOM 515 Community Nursing Seminar V 2 NUCOM 523 Community Organization for Family Health 2 NUCOM 531 Practicum in Family Centered Agency 2 Elective 3 16 Winter and Spring Quarters 600 Residency in Community Nursing No Credit This residency carries no credit but is a requirement for the M.S. degree with a major in Community Nursing. Minimum Required for Graduation 82



Master's Degree Program Geriatric/Gerontological Nursing

er		Quarter Hours
501	Behavioral Dynamics	4
501	· ·	
	Models in Nursing	2
451	_	5
	Electives	2-4
		13-15
arter		Hours
521	Systems of Health Care I	2
583	Clinical Investigation I	2
511	Seminar and Practicum I	7
452	Physiology II	5
		16
arter		Hours
522	Systems of Health Care II	2
584	Clinical Investigation II	2
512	Seminar and Practicum II	7
544	Clinical Assessment for Nursing Practice	4
		15
uarter		Hours
513	Seminar and Practicum III	9
	Electives	3-4
		12-13
er		Hours
589	Geriatric/Gerontological Internship	12
		3-4
	Elective	3-4
	Elective	15-16
	501 501 451 451 451 452 383 511 452 452 544 512 544	501 Behavioral Dynamics 501 The Use of Concepts, Theories and Models in Nursing 451 Physiology I Electives arter 521 Systems of Health Care I 583 Clinical Investigation I 511 Seminar and Practicum I 452 Physiology II arter 522 Systems of Health Care II 584 Clinical Investigation II 512 Seminar and Practicum II 514 Clinical Assessment for Nursing Practice duarter 513 Seminar and Practicum III Electives

Master's Degree Program Oncology and Medical Surgical Nursing

Fall Quart	er		Quarter Hours
BEHAV	501	Behavioral Dynamics	4
NURSG	501	The Use of Concepts, Theories and	
		Models in Nursing	2
PHYSO	451	Physiology I	5
		Elective	2-3
			13-14
Winter Qu	arter		Hours
HCSYS	521	Systems of Health Care I	2
HLCED	583	Clinical Investigation I	2
NUM/S	511		
or		Seminar and Practicum I	7
NUONC	511		
PHYSO	452	Physiology II	5
Spring Qua	arter		Hours
HCSYS	522	Systems of Health Care II	2
HLCED	584	Clinical Investigation II	2
NUM/S	512	, and the second	
or		Seminar and Practicum II	7
NUONC	512		
		Elective	2-3
			13-14
Summer Q	uarter		Hours
NUM/S	513		
or		Seminar and Practicum III	9
NUONC	513		
		Elective	3-4
			12-13
		Minimum Required for Graduation	55

Master's Degree Program Psychiatric Nursing

Fall Quart	ter		Quarter Hours
BEHAV	501	Behavior Dynamics	4
NURSG	501	The Use of Concepts, Theories and	
		Models in Nursing	2
PHYSO	451	Physiology I*	5
		Elective	2-3
			13-14
Winter Qu	ıarter		Hours
HCSYS	521	Systems of Health Care I	2
HLCED	583	Clinical Investigation I	2
NUPSY	511	Seminar and Practicum I	7
		Electives	2-5
			13-16
Spring Qu	arter		Hours
HCSYS	522	Systems of Health Care II	2
HLCED	584	Clinical Investigation II	2 7
NUPSY	512	Seminar and Practicum II	7 2-4
		Elective	13-15
			10 10
Summer C	Quarter		Hours
NUPSY	513	Seminar and Practicum III	9
		Elective	3-4
			12-13
		Minimum Required for Graduation	55

^{*}ANAT 561 Neurobiology or PSYCO 454 Physiological Psychology may be substituted, with the difference in hours made up by elective credits.

Post-Master's Study in Geriatric Nursing

Recognizing the need for clinical specialists in geriatric nursing, Rush has introduced a post-master's program for other clinical specialists who now wish to concentrate on the complex requirements of giving care to geriatric patients. This post-master's certificate program coincides in several areas with course offerings in the M.S. program in geriatric nursing, including a one quarter internship.

Entrance to this program requires a Master of Science degree in another clinical specialty. The program begins in the Spring Quarter only.

Post-Master's Curriculum Geriatric Nursing

			Quarter
Spring Quarter			Hours
NUGER	512	Seminar and Practicum II	7
		Elective	4
			11
Summer C)uarter		
NUGER	513	Seminar and Practicum III	9
		Elective	4
			13
Fall Quart	er		
NUGER	589	Geriatric/Gerontological Internship	12
		Elective	4
			16
		Total Required	40

Doctoral Study

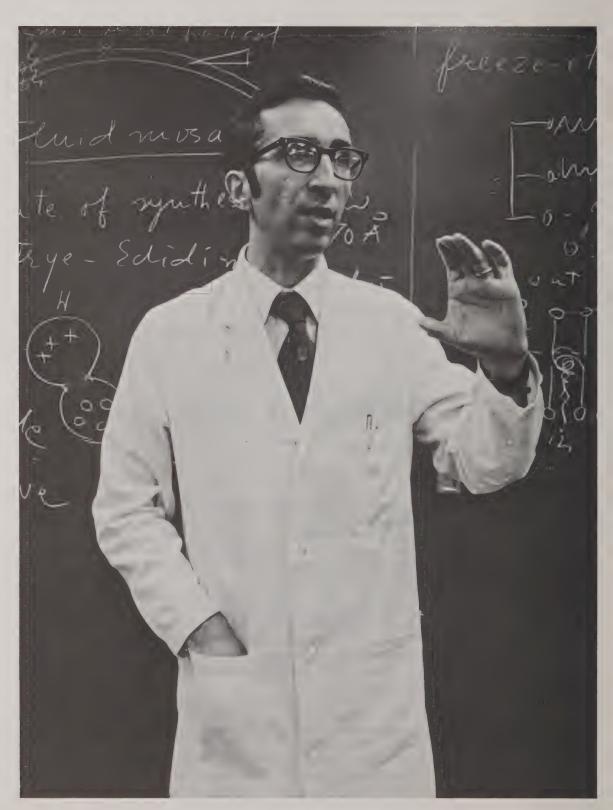
In July, 1974, the Executive Board of the Commission on Institutions of Higher Education of the North Central Association of Colleges and Secondary Schools voted to accredit Rush University at the doctoral degree level. The action of the Commission was based on the site visit evaluation report and discussions held before the Commission at meetings in Chicago.

The program leading to the Doctor of Nursing degree (D.N.), now in its initial organization phase, will be implemented by the faculty of the College of Nursing and Allied Health Sciences. The doctoral degree will be awarded by Rush University in recognition of a high level of expertise in the area of clinical specialization, and in recognition of an original research contribution to knowledge in the area.

A grant of \$100,000 from the Chicago Community Trust is enabling the Center for Clinical Research in Nursing to begin its programs as the basis for the scientific components in the new graduate degree.

Students in doctoral study will be expected to provide leadership in the improvement of nursing care and nursing education and research. "We must, however, be careful that we do not become so joined to our science that we become separated from our patients or they will be denied our scientific skills."

James A. Campbell, M.D., President



Course Descriptions

Courses listed and described in this section are Rush University courses expected to be offered to students of the College of Nursing and Allied Health Sciences for the 1975-76 academic year, and do not represent a complete catalog of Rush University courses.

Course Abbreviations

All Rush University courses are listed alphabetically according to the *discipline* to which the course content is most closely related. These disciplines do not necessarily reflect a *department* in the University or in the Medical Center.

The following list of disciplines and their abbreviations represents course offerings of Rush University. Disciplines representing courses listed in this catalog are indicated by an asterisk (*).

1. Behavioral Sciences	BEHAV*
Psychology	PSYCO*
Sociology	SOCIO*
II. Biological Sciences	BIOSC*
Anatomy	ANAT*
Biochemistry	BIOCH*
Bioengineering	BIOEN
Genetics	GENET
Immunology	IMMUN*
Microbiology	MICRO*
Pharmacology	PHARM*
Physiology	PHYSO*

III.	Clinical Sciences	CLSCI
	Allied Health Specialties	ALHSP
	Audiology	AUDIO
	Dentistry	DENT
	•	LIBSC
	Library Sciences	
	Medical Technology	MEDTK*
	Nutrition	NUTRI*
	Occupational Therapy	OCCRX
	Physical Therapy	PHYRX
	Radiation Technology	RADTK
В.	Medical Specialties	MEDSP
	Clinical Tutorial	CLTUT
	Dermatology	DERM
	Family Medicine	FAMED
	Gerontology	GERON*
	Internal Medicine	MED*
	Neurology	NEURO
	Obstetrics-Gynecology	OBGYN
	Pathology	PATHO
	Pathophysiology	PPHYS*
	Pediatrics	PEDS
	Preventive Medicine	PRMED*
	Psychiatry	PSYCH
	Radiological Science	RADIO
	Surgery	SURGY
C.	Nursing Specialties	NURSG*
	Community Nursing	NUCOM*
	Geriatric Nursing	NUGER*
	Medical Nursing	NUMED
	Medical/Surgical Nursing	NUM/S*
	Obstetrical-Gynecological Nursing	NUOBG
	Oncology Nursing	NUONC*
	Pediatric Nursing	NUPED
	Psychiatric Nursing	NUPSY*
	Surgical Nursing	NUSGR*
D	Health Care Systems	HCSYS*
D.	Health and Society	HLSOC*
	Health Care Administration	HCADM*
	Health Care Education	HLCED*
	realth Care Education	HECED.
IV.	Physical Sciences	PHSCI
	Chemistry	CHEM
	Medical Physics	MEDPH*
	Mathematics	MATH
	Statistics	STATS*

Course Numbers

A three-digit course number follows the course abbreviation. Courses numbered 300-399 are third year level courses; courses numbered 400-449 are fourth year level courses; courses numbered 450-499 are dual level and may be taken for undergraduate or graduate credit; courses numbered 500-599 are graduate level; 600 represents a post-master's residency.

Course Content

The course title is followed by a brief description of course content. At the end of each course description are three hyphenated numbers, e.g., (2-3-3). The first number refers to hours per week in the classroom or seminar; the second, to number of hours per week in laboratory or clinical setting; the third, to number of quarter hours of credit.

Independent Study Courses

Students may enroll in an independent study course in any discipline of the University under the direction of the appropriate faculty member with his or her written permission, and the approval of the Office of the Dean.

The course numbers 441 and 591 will be used for *Independent Clinical Study*, with the appropriate discipline prefix.

The course number 449 will be used for academic *Independent Study* for undergraduates and 599 for *Independent Readings* for graduate students, with the appropriate discipline prefix.

Introduction of New Courses

Upon approval of the faculty, new courses not listed in the catalog may be listed as *Special Topics* under the appropriate discipline prefix and the numbers 300, 400 or 500 to indicate the level of offering. The topic covered will be listed on the student's academic record.

"If health professionals desire more influence on the care system, they must acquire the knowledge needed to earn that increased influence."

Luther Christman, Ph.D., Dean





Course Offerings

Anatomy

ANAT 462 Introduction to Neurobiology. The development, morphology and functional significance of the human nervous system is presented in lecture and by demonstrations. Fixed human brain preparations and series of neurological slides are used as visual aid materials. Prerequisite: Courses in Human Biology or Anatomy and Physiology or Comparative Anatomy. Consent of Instructor. (3-0-3)

ANAT 463 Neurological Aspects of Patient Care. The physiological factors underlying pain, consciousness and sleep are discussed, as well as the signs and symptoms of common neurological disorders. The material is presented by means of lectures, demonstrations and visual aids. Prerequisite: Anatomy 462. (1-0-1)

Behavioral Science

BEHAV 301 Advanced Behavioral Science I. Personality, socio-cultural, and development variables are examined and their contribution to health-illness behavior discussed. Topics are communication, growth and development, theories of learning, health-illness behavior, and stress and problem-solving methods. (4-0-4)

BEHAV 381 Research Methodology. Methods for theory construction and theory testing. Hypotheses and concept development, operationalization and measurement, sampling, research designs, observational methods, scaling and analysis data. (3-0-3)

BEHAV 401 Advanced Behavioral Science II. Exploration of individual and social behavior. Major topics are communication theory, stress and crisis intervention, psychopathology, social problems of relevance to health care, and cultural influences on behavior. The integration of multiple perspectives on these topics and the ability to analyze behavioral problems using both individual and structural level concepts are emphasized. Prerequisite: BEHAV 301. (4-0-4)

BEHAV 454 Human Communications: Theory and Practice. A survey of some major contemporary theories of human communication: cultural, social-psychological, and mathematic-cybernetic, and applications to interpersonal and group modes of interaction. Special emphasis on influence, persuasion, adaptation and change as interpersonal tasks in the health sciences. (4-0-4)

BEHAV 461 Death and Dying Seminar. An examination of the fears and feelings elicited by the clinical experience of contact with the dying patient, the fears and feelings of the critically ill patient and how to deal realistically with these fears in a clinical setting. Includes supervised patient contact. Permission of instructor. Graded P or N. (2-0-2)

BEHAV 462 *Death and Dying Seminar II*. Continuation of BEHAV 461. Individual conferences with advanced students on problems raised in their clinical experiences. Graded P or N. (1-3-2)

BEHAV 501 Behavioral Dynamics. Selected topics provide the basic concepts of intra- and inter-personal behavioral dynamics. The course is designed to aid the clinical specialist or nurse practitioner in understanding the emotional needs of both psychiatric and non-psychiatric patient populations and to guide staff intervention in meeting these needs. Topics include developmental changes with age; socialization and resocialization; personal adjustment mechanisms in stress, conflict, and anxiety; group dynamics and leadership. (4-0-4)

Biochemistry

BIOCH 301 Basic Biochemistry. A lecture course designed as an intensive introduction to biochemistry. Emphasis is on descriptive chemistry of the main classes of biochemical compounds and metabolic processes in the human organism, and changes associated with disease processes. Prerequisite: one year general chemistry, one course organic chemistry. (4-0-4)

BIOCH 401 Clinical Chemistry I. The analytical and biochemical basis of methods used for chemical analysis of body fluids, as related to diagnosis and treatment of disease. Topics discussed include blood sugar, carbohydrate tolerance tests, renal function tests, plasma electrolytes, blood gases, proteins, enzymes and cholesterol. Critical evaluation of methods is emphasized. Prerequisite: BIOCH 301 or equivalent. (3-0-3)

BIOCH 411 Clinical Chemistry I Lab. Experiments designed to instruct students in the quantitative analysis of clinically important metabolites. Emphasis is placed on accuracy, quality control and fine technique. Manual methods are stressed, with a variety of methods and instruments used. The student learns to apply error theory and statistics in interpreting and evaluating results. Corequisite: BIOCH 401. (0-8-2)

BIOCH 421 Clinical Chemistry II. A continuation of Clinical Chemistry I, covering additional tests and topics: lipids, special proteins, chemical hematology, vitamins, biogenic amines, elementary toxicology, liver and thyroid function tests and steroid methods. Principles underlying automated and computer application methods will be discussed. Prerequisite: BIOCH 401. (3-0-3)

BIOCH 431 Clinical Chemistry II Lab. Continuation of BIOCH 411. Time will be equally divided between learning more advanced procedures in a teaching laboratory and applications of procedures in the automated clinical laboratory of the hospital. Corequisite: BIOCH 411. (0-10-2)

BIOCH 451 *Biochemistry I*. The chemistry and metabolism of biologically important compounds, mechanisms through which organisms derive energy from these processes, mechanisms for control of metabolic events, and reproduction on the molecular level, including genetic coding and DNA replication, are studied in lectures and tutorials. (4-0-4)

BIOCH 452 Biochemistry II. Continuation of BIOCH 451. (4-0-4)

Biological Sciences

BIOSC 301 Advanced Biological Sciences I. The course is structured around normal and abnormal functioning of the human body. Physiological processes are integrated with the pathophysiological syndromes and covered as a unit. (4-0-4)

BIOSC 302 *Advanced Biological Sciences II*. Continuation of BIOSC 301. (4-0-4)

Gerontology

GERON 452 The Aging Process: An Inquiry. A survey of aging man and his ecological relationships. The emphasis is on the normal aging process. Opportunity is offered to develop insight into the problems of the aged through a variety of problem-solving approaches. (Formerly NUGER 452.) (2-0-2)

GERON 462 Observable Stress in the Elderly. Using both the physiological and psychosocial dimensions of stress as a conceptual framework, sensory deprivation and/or overload will be examined as one of the stresses to which the institutionalized elderly are frequently subjected. Reality orientation and attitude therapy will be investigated as two recognized means of assisting the institutionalized elderly to cope with an excess or lack of sensory stimulation resulting in confusion. (2-0-2)

GERON 463 Rehabilitation of the Aged and Chronically Ill. The health care needs of the aged and the chronically ill following changes in their health status. Concepts and skills of physical, emotional and social rehabilitation will be incorporated into the framework of individual, family, health institutions, and community. The aim is to prepare the student to assist the client and significant others in forming realistic goals for adaptation to a changed health status and life-style. Students desiring additional training in rehabilitation skills or those wishing to include clinical practice may contract with the instructor for an additional one or two credits. (2-4 credits)

GERON 504 The Holistic Dimensions of the Later Ages. A seminar based on the premise that physiological function is manifested in behavior, and that behavior influences the quality of physiological function. Therefore, the course will identify concepts in the biological, behavioral, and social sciences which together create a holistic view of the aging process. Nursing intervention arising from the integrated approach to the individual and his interaction with his environments will be emphasized in the context of the aging person. (4-0-4)

Health Care Administration

HCADM 301 *Health Care Management.* Organizational design and managerial processes of planning, organizing, directing and controlling, as well as the dynamics of managerial jobs, are studied. Emphasis is on management strategies and techniques in the area of health care delivery. (3-0-3)

HCADM 312 Supervisory Management. The supervisor as manager functioning in an environment of legal and social change. Basic managerial concepts are covered as they apply to a health care setting. Fair Employment Practices, health and safety, unions, training and other managerial topics are discussed. (2-0-2)

HCADM 321 Principles and Theories of Food Service Management. Introduction to the managerial processes of planning, organizing, directing, monitoring and evaluating an enterprise. Techniques in management of human, material and financial resources in the context of a food service operation. Practical experience in a food service setting is provided. (3-3-4)

HCADM 452 Contemporary Analysis of the Health Science Professions. A seminar, study-group approach to selected contemporary issues in the health professions. (The selection of issues will change from time to time as high-intensity trends develop or as student needs develop.) The issues selected will range across elements of the social, ethical, legal-legislative, economic, and historical roots of the health professions. Senior or graduate standing. (Formerly HCSYS 434.) (2-0-2)

HCADM 511 Medical Jurisprudence. An introduction to the field of medical jurisprudence. The purpose is to expose the student to a wide variety of topics with particular emphasis on the interrelation of medicine and legal issues. Interdisciplinary in focus, material covered in class and assigned readings will be drawn from the fields of law, political science, sociology, and psychology. (4-0-4)

HCADM 524 Health Care Environment: An Organizational Perspective. Introduction to various theories of organization behavior and their relevance to management of clinical and patient care processes. Special emphasis is on problems related to implementing change in the health environment at both the corporate and unit levels in the organization. Focus includes use of control systems to monitor the progress or stagnation of an institution. Limited enrollment. (4-0-4)

Health Care Systems

HCSYS 302 Dynamics of Health Care. An overview of the various contributions representative members of the health team make to the delivery of health care. Component topics include professionalism, ethics, licensure, organizational structure of hospitals and other medical facilities, Medicare/Medicaid and medical-legal considerations. (2-0-2)

HCSYS 401 Sociobiological Systems. Focus on social systems from micro to macro levels and their influences on and interactions with biological systems, problems, and conditions. A systems approach is used to study selected illnesses and social problems. Prerequisites: BEHAV 301, BIOSC 401. (4-0-4)

HCSYS 521 Systems of Health Care I. Seminar course in the study of the health care delivery system in the U.S. Particular emphasis on identifying historical forces which have shaped the current system for health care; the organization of the hospital and the medical center; current manpower roles in health care; and the current issues that face the health system today. Discussion will also focus on external forces and controls that substantially affect the health care system. Students will be expected to write a research paper and present it orally to the class. (2-0-2)

HCSYS 522 Systems of Health Care II. Continuation of HCSYS 521. (2-0-2)

HCSYS 541 Seminar on Health Care Issues. Specific topics are discussed in great detail. Focus will be on issues and concerns in health on Chicago's West Side and in the entire metropolitan area, and the relationships of Rush with them. Students may be asked to do field work assignments involving specific problems or concerns that are taking place at Rush-Presbyterian-St. Luke's Medical Center. (2-0-2)

HCSYS 599 *Independent Study*. Utilized primarily in conjunction with specific projects or topics in HCSYS 541 for two credits. Occasionally available as special elective. (Variable credit.)

Health Care Education

HLCED 382 *Introduction to Research*. Research methodology fundamentals. Includes evaluation of published research and ethics and protocols of human investigation. Prerequisite: Course in Statistics. (2-0-2)

HLCED 451 *Perspectives in Clinical Teaching*. Seminar in teaching strategies, including theoretical basis, mode of presentation, and application in clinical settings. Exploration of contemporary educational issues and models and their implications for the practitioner/teacher. Emphasis is on creation of innovative and flexible teaching styles in various clinical areas. (3-0-3)

HLCED 454 Development of Instructional Media. The media as arts of communication. A survey of communication theory and its relationship to the communication process. Utilizing various instructional media, students design a program of instruction relating to some aspect of the health professions. (2-0-2)

HLCED 461 Educational Diagnosis. The purpose is to sensitize future practitioners to three major psychological characteristics which are important to learning and instruction, and which vary from person to person. Topics include: Degrees of Freedom in Learning; Language Code in Learning; Modes for Representing Concepts; Diagnostic Procedures; Applications. (4-0-4)

HLCED 583 Clinical Investigation I. A seminar course based on the philosophy of science. The central aim of the course is to provide a basis for the utilization of the methods of science in professional practice. Content includes introductory statistics, research methodology, and ethical and legal considerations in clinical research. Prerequisite: Introductory Statistics. (2-0-2)

HLCED 584 Clinical Investigation II.

A continuation of HLCED 583 Clinical Investigation I. (2-0-2)

Health and Society

HLSOC 454 Health in the Developing Nations. A recognition that all nations are in a stage of development. Special emphasis will be placed on the problems and resources which affect health care in the less developed nations. (2-0-2)

Immunology

IMMUN 301 Basic Immunology. An introduction to the basic concepts and terminology of immunity including development, structure and function of the lymphoid systems, the basis of antigenicity, antibody structure, methods of detection and measurement, mechanisms of cellular immunity, white cell function, hypersensitivity reactions, the complement system, and mechanisms of immune suppression and tolerance. (3-0-3)

IMMUN 402 Clinical Immunology. Clinical and applied immunology, as it relates to immunologic processes in various disease states, blood bank and histocompatibility testing. The use of immunology as a diagnostic, prognostic and therapeutic aid is studied. Prerequisite: IMMUN 301. (3-0-3)

IMMUN 412 Clinical Immunology Lab. An introductory laboratory course covering basic techniques of agglutination, precipitation, immunofluorescence, radioimmunoassay, cellular separation, assay methods, and techniques specific to blood banking. Prerequisite: IMMUN 402. (0-9-3)

ternal Medicine

MED 301 Hematology I. Study of normal hematopoiesis including development, metabolism and function of red cells, white cells and platelets and an introduction to the various associated hematologic disorders. (3-0-3)

MED 311 Hematology I Lab. Laboratory experiences dealing with basic routine tests performed in a clinical hematology laboratory, such as manual and simple automated cell counting, hemoglobin determination, hematocrit determination and differential counting with emphasis on normal cells. Includes experience in blood collection technique. Corequisite: MED 301. (0-9-3)

MED 401 Body Fluid Analysis. Analyses of various body fluids with emphasis on the theory and practice of clinical procedures. Component topics will include the analysis of urine, gastric juice, cerebral spinal fluid, feces, semen, transudates and exudates. (3-3-4)

MED 425 Hematology II. Same as PPHYS 525. Includes review of normal hematopoiesis and an in-depth study of the various hematologic disorders, their causes, clinical features, and significant related laboratory data and treatment. Prerequisite: MED 301, 311. (4-0-4)

MED 435 Hematology II Lab. In-depth study of abnormal cell morphology in the bone marrow and peripheral blood and its relationship to various hematologic disorders. Also includes the performance of the more specialized hematologic techniques such as osmotic fragility, special stains. Corequisite: MED 425. (0-6-2)

Medical Physics

MEDPH 311 *Medical Physics I*. Basic physical principles applied to medical science, particularly to the function of the human body. Includes body mechanics; strength of material and level systems; sound and process of hearing; thermal dynamics and the body; light optics and visions; electricity and the body; radiation and the body. (4-0-4)

MEDPH 321 *Medical Physics II*. Application of the principles of optics, electricity, radiation, electronics to laboratory instrumentation. Prerequisite: MEDPH 311. (3-0-3)

MEDPH 322 *Medical Physics II Lab.* Corequisite: MEDPH 321. (0-6-2)

Medical Technology

MEDTK 411, 412, 413 *Practicum in Medical Technology I, II, III.* Clinical application of basic medical technology skills and advanced methodology. Rotation through clinical areas of the hospital over a period of three quarters. (0-15-5)

MEDTK 441 Seminar in Medical Technology. Discussion of current topics in medical technology and associated fields. Students present case studies. (2-0-2)

Microbiology

MICRO 311 Diagnostic Bacteriology. Special emphasis on diagnostic procedures employed in the Clinical Bacteriology Laboratory such as specimen collection, isolation and identification of medically important bacteria. Antibiotic sensitivity testing and determination of antibiotic levels in serum are studied. (3-0-3)

MICRO 321 Diagnostic Bacteriology Lab. Laboratory exercises in diagnostic procedures of isolation and identification of medically important bacteria. Developing proficiency is stressed. Corequisite: MICRO 311. (0-6-2)

MICRO 411 Special Microbiology. This course provides clinical background in mycology, parasitology and virology. Emphasis is on the diagnostic procedures utilized in the laboratory. Prerequisite: MICRO 311. (3-0-3)

MICRO 421 Special Microbiology Lab. Lab consists of isolation and identification of medically important fungi, slide preparation, and identification of parasites. Diagnostic tests for virology are also included in this course. Prerequisite: MICRO 312. Corequisite: MICRO 411. (0-6-2)

Nursing—Community

NUCOM 501 *Physical Assessment*. Methods for obtaining and recording a complete data base of the patient's history and physical assessment. Includes history-taking, use of problem-oriented records, physical, emotional and developmental assessment and the use and interpretation of diagnostic instruments and procedures. (4-6-6)

NUCOM 502, 503 Adult Health Concepts I and II. Integration of the concepts of NUCOM 501, pathophysiology and management of health and specific chronic diseases and acute and emergency conditions in adults. Includes genetics, health maintenance appraisal and counseling, emotional components of illness, pathophysiology, assessment and management of disorders of specific acute and chronic illnesses, emergency medicine and disaster planning. Each course includes nine hours each week in an appropriate clinical practice. Prerequisite: NUCOM 501. (4-9-7)

NUCOM 504 *Ob/Gyn Health Concepts*. Integration of concepts from NUCOM 501, 502, and 503. Physiology of the reproductive system, labor and delivery; pathophysiology of complications of prenatal, labor, delivery, and specific gynecological conditions; assessment and management of obstetrical and gynecological conditions. Includes counseling, teaching and management of family planning techniques. Prerequisite: NUCOM 501. (5-9-8)

NUCOM 505 *Pediatric Health Concepts.* The growth and development of children and the pathophysiology, assessment, and management of health and specific acute pediatric illnesses. Includes the study of common pediatric problems including allergies, immunizations, poisoning, skin disorders, and communicable diseases. Prerequisite: NUCOM 501. (4-9-7)

NUCOM 511 Community Nursing Seminar I. The first in a series of five seminars provides a forum for discussion of actual and potential problems facing the community nurse practitioner. Topics include: nurse-physician relationship, role development, a family framework of care, response to stress, a public health approach to health care. (2-0-2)

NUCOM 512, 513, 514, 515 Community Nursing Seminar II, III, IV, V. Participation in problem-solving discussions related to the change process, management concepts, concepts of authority and accountability and application of the nursing process. Application of teaching-learning theories with clients, families and communities will also be explored. Analysis of community nurse practice issues including role socialization, team relationships, political, economic and socio-cultural forces and the organization and delivery of health care: Prerequisite: NUCOM 511. 512: (1-0-1), 513-15: (2-0-2)

NUCOM 521 *Community Health Services*. Socio-economic determinants of health services. Analysis of the organization of preventive community health services on local, state and national levels. Includes examination of institutional, environmental and occupational services. (3-0-3)

NUCOM 523 Community Organization for Family Health. Exploration of federal, state and local agencies and their programs which support family integrity. Both public and private agencies are examined. (2-0-2)

NUCOM 531 Practicum in Family-Centered Agency. A practicum experience in a family-centered community health agency. A written project of the student's choice which is negotiated with the advisor and the agency will be required. (0-6-2)

NUCOM 600 Residency in Community Nursing. A two-quarter residency following all required courses. During this time, the student must function in a setting which allows for the integration of clinical assessment, management, nursing, and community organization skills, and provides opportunities to increase proficiency and efficiency. The setting will be chosen and negotiations regarding practice will be carried out by the student with assistance and approval from the faculty. The student may choose to spend time in one or more interest tracts within the setting. The setting will be asked to provide the student with a primary preceptor. Rush will maintain supervisory contact through communication with the student's preceptor, patient encounter forms, chart audits, and periodic evaluation reports from preceptors. It is anticipated that students will receive some income from the agency or institution sponsoring the residency. Students are required to register each quarter of the residency and pay for health insurance coverage and student activity fee, if assessed. No academic credits.

Nursing—Geriatric

NUGER 511 Nursing Seminar and Practicum I. Seminar and Practicum in Geriatric Nursing and sub-specialties such as oncology or cardiovascular diseases. Seminar focuses on nursing problems in geriatrics, with discussion of theories, clinical approaches and research findings. Practicum includes study and observation of the role of the clinical specialist, and experience with patients to prepare for practice as a clinical specialist in geriatric nursing. Students may select field experiences in different settings available in the Rush network, in primary, secondary, or tertiary care centers.

Prerequisite: NURSG 501. (Experiences vary—7 credits)

NUGER 512 Nursing Seminar and Practicum II. Continuation of content covered in NUGER 511. (Experiences vary—7 credits)

NUGER 513 *Nursing Seminar and Practicum III*. Continuation of NUGER 512. Includes completion of a clinical research project. (Experiences vary—9 credits)







NUGER 589 Geriatric/Gerontological Internship. Designed to allow the student to gain maximum experience in providing expert nursing care for aging adults. The student is given line responsibility and accountability for his or her case load and is under close supervision of experienced practitioners in the field. The course provides the student an opportunity to operationalize in the "real world" strategies for sound health care explored and developed in the preceding course work. (12 credits)

NUGER 591 *Independent Clinical Study*. Intensive independent study in geriatric nursing. (Variable credit)

Nursing—Medical/Surgical

NUM/S 511 Nursing Seminar and Practicum I. Seminar and Practicum in Medical/Surgical Nursing, and the subspecialties such as oncology and cardiovascular diseases. Seminar focuses on nursing problems with discussion of relevant theories, clinical approaches and research findings. The practicum includes study and observation of the role of the clinical specialist, and experience with patients to prepare for practice as a clinical specialist in the particular specialty area. Students may select field experiences in settings available within the Rush network, in primary, secondary, or tertiary care centers. Clinical experiences may focus on different age groups. Prerequisite: NURSG 501. (Experiences vary—7 credits)

NUM/S 512 Nursing Seminar and Practicum II. Continuation of content covered in NUM/S 511. (Experiences vary—7 credits)

NUM/S 513 Nursing Seminar and Practicum III. Continuation of NUM/S 512. Includes completion of a clinical research project. (Experiences vary—9 credits)

Nursing—Oncology

NUONC 511 Nursing Seminar and Practicum I. Seminar focuses on oncology nursing problems with discussion of relevant theories, clinical approaches and research findings. The practicum includes study and observation of the role of the clinical specialist, and experience with patients to prepare for practice as a clinical specialist in oncology nursing. Students may select field experiences in settings available within the Rush network, in primary, secondary, or tertiary care centers. Clinical experiences may focus on different age groups. Prerequisite: NURSG 501. (Experiences vary—7 credits)

NUONC 512 *Nursing Seminar and Practicum II*. Continuation of NUONC 511. (Experiences vary—7 credits)

NUONC 513 *Nursing Seminar and Practicum III*. Continuation of NUONC 512. Includes completion of a clinical research project. (Experiences vary—9 credits)

Nursing—Psychiatric

NUPSY 511 Nursing Seminar and Practicum I. Seminar and Practicum in Psychiatric Nursing. Seminar focuses on nursing problems with discussion of relevant theories, clinical approaches and research findings. The practicum includes study and observation of the role of the clinical specialist, and experience with patients to prepare for practice as a clinical specialist in psychiatric nursing. Students may select field experiences in different settings available within the Rush network, in primary, secondary, or tertiary care centers. Clinical experiences may focus on different age groups. Prerequisite: NURSG 501. (Experiences vary—7 credits)

NUPSY 512 Nursing Seminar and Practicum II. Continuation of content covered in NUPSY 511. (Experiences vary—7 credits)

NUPSY 513 Nursing Seminar and Practicum III. Continuation of NUPSY 512. Includes completion of a clinical research project. (Experiences vary—9 credits)

Nursing—General

NURSG 311, 312, 313, 411, 412, 413 Seminar and Practicum I - VI. Individual course descriptions are listed below. The amount of time spent in seminar may vary between three and six hours and the clinical practicum between twelve and eighteen hours each week. Included in the clinical practicum are basic nursing activities which are performed in simulated settings. Instructional supervision and various auto-tutorial media are utilized to ensure competence before students practice the skills in the clinical setting. A failing grade in either the seminar or the practicum will result in an "F" for the entire course.

NURSG 311 Seminar and Practicum I. Introduction to the profession of nursing with emphasis on the application of selected behavioral science concepts to nursing practice. The concepts of communication, health-illness continuum, stress-adaptation, problem-solving, teaching-learning, and growth and development are studied in relation to the nursing process. Corequisite: BEHAV 301. (8 credits)

NURSG 312 Seminar and Practicum II. Application of biological science (physiology and pathophysiology) to nursing practice. Students are assigned to various clinical settings where they put into practice knowledge acquired in science lectures. Weekly seminars stress nursing principles and rationale and are the points at which science is made applicable to nursing practice. Corequisite: BIOSC 301. (8 credits)

NURSG 313 Seminar and Practicum III. Continuation of NURSG 312. Corequisite: BIOSC 302. (8 credits)

NURSG 323 Heritage of Nursing. Study of the contributions and influences of nursing and nursing leaders with consideration of the social and cultural eras in which they lived. Emphasis is placed on those contributions and influences which advanced nursing and on trends and issues that influence the individual and the nursing profession. (2-0-2)

NURSG 384 Seminar in Electrocardiography. Designed to help the student recognize and describe the common disorders of the cardiac rhythm, underlying hemodynamic mechanisms, and nursing implications. (1-0-1)

NURSG 411 Seminar and Practicum IV. Application of sociobiological concepts to nursing practice. Students learn to use the systems approach in experiences related to group behavior in the context of organizations and political and economic problems and issues. The major theme of the course is the interaction of multiple systems with health and illness. Corequisite: HCSYS 401. (9 credits)

NURSG 412 Seminar and Practicum V. Application of behavioral science to nursing practice. The major focus is the utilization of behavioral science concepts in the nursing care of patients. Interpersonal communication and role theory constructs are examined and practiced in relation to individuals, families, and groups. The interpersonal intervention process is studied and practiced, including the development of skills to help ensure sensitivity to the wide range of socio-cultural influences on behavior. Corequisite: BEHAV 401. (9 credits)

NURSG 413 Seminar and Practicum VI. Application of science to nursing practice in a chosen clinical setting. The seminar acts as a forum for students to present their experiences as applied scientists in a clinical nursing area. Nursing responsibility is assumed in this final quarter practicum. Corequisite: NURSG 431. (9 credits 1976; 10 credits 1977)

NURSG 431 *Concentrated Clinical Studies.* Student has choice of a clinical area for in-depth learning. Student contracts for a combination of formal, tutorial or self-directed study. (3-0-3)

NURSG 434 *Professional Issues*. Issues in nursing and health care are discussed, particularly as they relate to the new graduate. Topics include responsibility and accountability, quality of care, peer review and labor-management relationships. (1-0-1)

NURSG 441 *Independent Clinical Study*. Intensive independent study in a clinical area of nursing. (Variable credit)

NURSG 449 *Independent Study*. Student contracts with nursing faculty for independent academic study in an area of nursing. (Variable credit)

NURSG 501 The Use of Concepts, Theories and Models in Nursing Practice. A seminar on concepts, theories and models. Emphasis is on the use of models in nursing, their theoretical base and the operationalization of models in nursing practice. (2-0-2)



NURSG 544 Clinical Assessment for Nursing Practice. Health status evaluation of patients as practiced by the clinical nurse specialist. Course includes: identification and practice of specific data collection mechanisms and techniques; relating data collection to patient's psychosocial and biophysiologic development; assessing patient status through inspection, palpation, ausculation. Attendance required at all lectures, use of psychomotor skills lab expected. Prerequisite: Graduate level Physiology. (4-1-4)

NURSG 591 *Independent Clinical Study*. Intensive independent study in a clinical area of nursing. Prerequisite: HLCED 583. (2-5 credits)

NURSG 599 *Independent Reading.* Student contracts with nursing faculty for independent academic study in an area of nursing. (2-5 credits)

Nutrition

NUTRI 421 *Nutritional Care During the Life Cycle*. The relation of nutrition to the needs of the individual in states of both health and disease throughout the life cycle. Cultural, social and psychological influences on food habits; food needs and costs; nutrition and health; nutrition and clinical care. (2-6-4)

NUTRI 455 Ecology of Nutrition. The sociological, psychological, economic, political, and cultural factors which affect the intake of required nutrients observed on a global basis. Ecological imbalance, nutritional diseases, and their long-term ramifications on the individual and his world are studied in detail. (3-0-3)

NUTRI 461 *Nutrition, Growth and Development.* Examination of the development of metabolic and physiologic functions with primary consideration of mechanisms for the regulation of these events. The role of diet in these processes and in the determination of later functional capability is emphasized. (4-0-4)

NUTRI 465 *Ecology of Malnutrition in Urban Industrial Populations.* The epidemiologic approach to the study of malnutrition. Poverty, its broad meaning and implications. Social and psychological correlates of malnutrition. (3-0-3)

NUTRI 501 Nutritional Interrelationships I. A study of the dynamic interaction between the animal and its environment, particularly the diet. Chemical and metabolic phenomena involved in the development and maintenance of the mammalian organism. Regulation as a means of adaptation. Emphasis on understanding requirements for specific nutrients in individuals and populations, evaluation of food intakes and dietary habits, and on nutritional needs during pregnancy and lactation, growth and maturation, and disease. (4-0-4)

NUTRI 502 *Nutritional Interrelationships II*. Continuation of NUTRI 501. (4-0-4)

NUTRI 511 Seminar and Practicum I. Discussion of student-presented cases and clinical care conferences. In addition, for 12-15 hours of clinical practice per week, the student has responsibility for assessment, planning, implementing and evaluating nutritional care. (3-12-7)

NUTRI 512 *Seminar and Practicum II*. Continuation of NUTRI 511. (3-12-7)

NUTRI 555 *Ecology of Nutrition*. Same as NUTRI 455. Reserved for Clinical Nutrition students. Students prepare lectures and assist in presentations for NUTRI 455. (3-3-4)

NUTRI 561 Special Topics in Nutrition. Series of in-depth seminars covering topics of interest not completely covered in other courses. Example: total parenteral nutrition. (2-0-2)

NUTRI 565 Seminar in Nutrition. Student presentations of recent literature. (Variable credit)

NUTRI 591 *Independent Clinical Study*. Intensive clinical nutrition study on a subject and in a setting agreed upon by the student and advisor. Prerequisite: HLCED 583. (2-5 credits)

NUTRI 599 *Independent Reading*. Student contracts with a preceptor for independent academic study of a selected topic in nutrition. (2-5 credits)

Pharmacology

PHARM 301 *Introduction to Pharmacology*. Basic facts and principles upon which therapeutic pharmacology is based. Discussion includes such areas as major drug groups and major drug actions. Corequisite: NURSG 311 (2-0-2)

Physiology

PHYSO 451 *Physiology I*. Comprehensive physiology course covering all of the major organ systems. A conceptual approach to understanding of physiological functions is developed. Emphasis is placed on utilization of facts in problem-solving. (5-0-5)

PHYSO 452 Physiology II. Continuation of PHYSO 451. (5-0-5)

PHYSO 511 *Nutritional Physiology I*. Discussion of particular physiological systems with relation to principles of nutrition. (3-0-3)

PHYSO 512 *Nutritional Physiology II*. Continuation of PHYSO 511. (3-0-3)

Pathophysiology

PPHYS 576 Nutritional Pathophysiology I. The pathophysiology and medical management of disorders related to nutrition and the nutritional status of human beings.

Prerequisite: PHYSO 511. (3-0-3)

PPHYS 577 *Nutritional Pathophysiology II*. Continuation of PPHYS 576. (3-0-3)

Preventive Medicine

PRMED 503 *Epidemiology*. Principles and methods of epidemiologic investigation of infectious and non-infectious diseases. The distribution and dynamic behavior of disease in the population. Etiologic factors, modes of transmission, and pathogenesis of disease. Laboratory work includes methods of collecting and analyzing field observations. (2-3-3)

Psychology

PSYCO 453 Theories of Deviance. Exploration of contemporary sociological theories of deviance. Emphasis on interactional and labeling processes as they relate to definitions of deviance, societal reactions and systems of social control. Preference given to graduate students. Prerequisite: One introductory and/or one advanced course in sociology (2-0-2)

PSYCO 454 *Physiological Psychology*. A survey of gross and microscopic neuroanatomy, neurophysiology, and endocrinology. Includes group dissection of representative mammalian brains and demonstrations of the behavioral consequences of lesions and stimulation in the central nervous system and endocrine system. Same as PSY 414 at Illinois Institute of Technology. (4-0-4)

Sociology

SOCIO 511 *Processes of Social Change*. Theories and techniques of analyzing change processes and facilitating change in professional settings. Specific experiences of work in novel settings or roles will be shared by guest speakers. Theoretical and practical issues on becoming a change agent will be covered. (4-0-4)

Statistics

STATS 301 *Probability and Statistics*. Basic statistical concepts and techniques including probability measures. (3-0-3)

STATS 502 *Bio-Statistics*. Collection, tabulation and elementary analysis of data, including vital statistics, treatment of rates, distribution of variety and sampling variations. Probability, permutations and combinations, histograms, measures of location and dispersion, life tables, normal distributions, sampling distributions of norm and variance, normal approximation for dichotomous populations, point and interval estimation for norm and variance influence for two samples, paired observations. Prerequisite: STATS 301 or equivalent undergraduate statistics course. (3-0-3)

"Rush feels the need to assure the intellectual ferment that can only be obtained by research."

James A. Campbell, M.D., President





College of Nursing and Allied Health Sciences Faculty Roster

Ann Adams Assistant Professor of Nursing

B.A., Villanova University; M.P.H., The John Hopkins University

Israr Ali Instructor of Microbiology

B.Sc., University of Karachi; M.S., Loyola University;

Ph.D., University of Illinois

Sandra Amundson Instructor of Nursing

B.S.N., M.A., University of Iowa

John Ayer Professor of Pathology

A.B., Harvard University; M.S., University of Illinois;

M.D., McGill University

Winifred Ayers Assistant Professor of Food Services Management

B.A., Reed College; M.S., Illinois Institute of Technology

Mary Badura Instructor of Nursing

B.S.N., St. Xavier College; M.S.N., Loyola University

Instructor of Nursing

B.S.N., M.S.N., University of Maryland

David Bertauski Instructor of Nursing

B.S.N., University of Illinois; M.A., University of Iowa

Instructor of Nursing

B.S.N., Loyola University; M.S.N., University of California,

San Francisco

Alison Blasdell Instructor of Nursing

B.S.N., Southern Illinois University; M.S.N., University of Illinois

Instructor of Health Systems Management

B.S., Southern Illinois University; M.S., Northern Illinois University

Instructor of Nursing

B.S., College of St. Teresa; M.S., Loyola University

Margaret Brady Assistant Professor of Nursing

B.S.N., Marquette University; M.S., University of Colorado

Instructor of Sociology

A.B., Temple University; M.A., Ph.D., University of Chicago

Instructor of Health Systems Management

B.A., Lake Forest College; M.H.A., Washington University

Professor of Medicine

A.B., Knox College; M.D., Harvard University;

Sc.D., Knox College; L.H.D., Lake Forest College

Instructor of Nursing

B.S.N., Saint Louis University; M.S., Rush University

Instructor of Medical Technology

B.S., M.S., Marquette University

Assistant Professor of Nutrition

B.S., Michigan State University; M.S., Illinois Institute

of Technology

Professor of Psychology

M.A., Ph.D., University of Chicago

Professor of Pediatrics

M.D., Loyola University

Professor of Nursing

B.S.N., Temple University; Ph.D., Michigan State University

Instructor of Nursing

B.S.N., College of St. Theresa; M.A., University of Chicago

Mary Clark

H. Lee Bastin

Mary Bigongiari

Lenn Block

Joy Boarini

Leonard Braitman

James A. Campbell

Bruce Campbell

Pamela Carlson

Mary Castellanos

David I. Cheifetz

Joseph Christian

Luther Christman

Mary Carr

Michael Counte Assistant Professor of Sociology B.A., Southern Illinois University; M.A., Ph.D., University of Illinois Ernest Crane Instructor of Health Systems Management B.S., Rutgers University; M.B.A., University of Chicago Wanda Crouse Associate Professor of Nursing B.S.N., University of Illinois; A.M., University of Chicago Associate Professor of Nursing Lucille Davis B.S.N., M.S.N., University of Illinois; Ph.D., Northwestern University Ludmilla Demidow Instructor of Biochemistry B.S., M.S., Roosevelt University Sarah Detmer Assistant Professor of Nursing B.S., The Johns Hopkins University; M.S., Catholic University of America Leon Dingle Assistant Professor of Allied Health Sciences B.S., A & T State University; M.A., Governors State University; Ph.D., Union Graduate School Theresa Dolecek Instructor of Clinical Nutrition B.S., Michigan State University; M.S., Ohio State University Christine Du Mais Assistant Professor of Nursing B.S.N., Georgetown University; M.S.N., University of California Mary Ann Eells Associate Professor of Nursing B.S., State University of New York, Plattsburgh; M.S., Ed.D., University of Rochester Ellen Elpern Instructor of Nursing B.S.N., University of Michigan; M.S.N., University of Wisconsin Janet Feldman Assistant Professor of Nursing B.S.N., University of Illinois; M.S.N., Loyola University Jane Gentry Assistant Professor of Nursing B.S.N., University of Kansas; M.S.N., University of Colorado Mary Alice German Instructor of Nursing B.SN., University of Virginia; M.S.N., Case Western Reserve University Mary Glessner Instructor of Health Systems Management B.A., University of Northern Iowa; M.A., University of Iowa Susan Groenwald Instructor of Nursing B.S., M.S., Rush University Assistant Professor of Psychology Sally Haimo N.S., University of Chicago; M.A., Stanford University; Ph.D. candidate, University of Chicago La Vonne Hall Instructor of Nursing B.S., M.S., Ohio State University Assistant Professor of Clinical Nutrition Yolanda Hall B.E., Chicago Teachers College; M.S., Illinois Institute of Technology Donna Harris Instructor of Nursing B.S.N., University of California; M.S.N., University of Colorado

Judith Hart

Instructor of Nursing

B.S., M.S., Southern Illinois University

Michael Hartings Assistant Professor of Psychology A.B., Xavier University; M.S., Ph.D., Northwestern University Csaba Hegyvary Associate Professor of Medicine M.D., Medical University of Budapest Sue Hegyvary Associate Professor of Nursing B.S.N, University of Kentucky; M.N., Emory University; M.A., Ph.D., Vanderbilt University Karyn Holm Assistant Professor of Nursing B.S.N., M.S., DePaul University Valentina Hubej Instructor of Nursing B.S.N., DePaul University; M.S.N., St. Louis University Gloria Jacobson Instructor of Nursing B.S.N., Northern Illinois University; M.S., Rush University Richard Jelinek Professor of Engineering B.S.E., M.B.A., Ph.D., University of Michigan Judith Jezek Assistant Professor of Nursing B.S.N., University of Illinois; M.S., University of Colorado; M.S. candidate, Northwestern University Ruth Johnsen Assistant Professor of Nursing B.S., Elmhurst College; M.A., University of Chicago Candice Johnson Instructor of Nursing B.S.N., Illinois Wesleyan University; M.N., Emory University Sandra Jolley Assistant Professor of Nursing B.S., University of Wisconsin; M.S., University of North Carolina Howard Jones Assistant Professor of Health Systems Management A.B., Princeton University; M.H.A., University of Minnesota John Kachmar Associate Professor of Biochemistry B.S., University of Akron; M.S., Ph.D., University of Minnesota Elizabeth Kaiser Instructor of Nursing B.S.N., Spalding College; M.S.N., Catholic University of America Patricia Keith Instructor of Nursing B.S.N., Northern Illinois University; M.S., Rush University Assistant Professor of Nursing Joyce Keithley B.S.N., University of Illinois; M.S.N., DePaul University John Brunn King Assistant Professor of Health Systems Management B.A., Loyola University; M.B.A., Northwestern University Kathy Lamos Instructor of Nursing B.S.N., University of Michigan; M.S., University of California Instructor of Medical Technology Nancy Lee B.S., University of Illinois Instructor of Health Systems Management Wayne Lerner B.S., University of Illinois; M.H.A., University of Michigan Associate Professor of Nursing Myra Levine F.B., University of Chicago; M.S.N., Wayne State University Counselor and Assistant Professor Peggy Lusk B.A., Drury College; M.A., Syracuse University Assistant Professor of Nursing Robert Lyons B.S.N., University of Illinois; M.A., University of Iowa Assistant Professor of Clinical Nutrition Kathleen Mahan

B.S., Northwestern University; M.S., Tulane University

Helen Maibenco Professor of Anatomy B.S., Wheaton College; M.S., DePaul University; Ph.D., University of Illinois Carol Matheis Instructor of Nursing B.S.N., Spalding College; M.S., University of Kentucky Herbert Miller Instructor of Medical Technology B.S., DePaul University; M.A., Governors State University Yvonne Munn Associate Professor of Nursing B.S.N., University of Alberta, Canada; M.S.N., University of California **Dorice Narins** Associate Professor of Clinical Nutrition B.S., Northwestern University; Ph.D., Massachusetts Institute of Technology Rose Navarro Assistant Professor of Nursing B.S.N., St. Xavier College; M.S.N., University of Illinois Ann Neeley Assistant Professor of Nursing B.S.N., M.S.N., Washington University; M.A., Ph.D., George Peabody College Margaret Novy Instructor of Nursing B.S., St. Xavier College; M.S., Indiana University Frederica O'Connor Instructor of Nursing B.S.N., M.S.N., University of Illinois Donald Oder Assistant Professor of Health Systems Management B.S., Wichita State University Patricia Phillips Assistant Professor of Nursing B.S.N., University of Kansas; M.N., University of Florida E. Virginia Pinney Assistant Professor of Food Services Management B.S., University of Florida; M.S., Illinois Institute of Technology Faith Price Instructor of Nursing B.S., University of Illinois; M.N., University of Florida Marlene Horwitz Redemske Instructor of Nursing B.S.N., University of Illinois; M.S.N., Wayne State University Margueritte Rydlewski Instructor of Nursing B.S.N., University of Illinois; M.S.N., Saint Louis University Myra Sandahl Instructor of Nursing B.S.N., Medical College of Virginia; M.S.N., Catholic University of America Eileen Sandrick Instructor of Nursing B.S.N., Alverno College; M.S., Boston University Linda Schaad Assistant Professor of Nursing B.S.N., University of Maryland; M.S.N., Catholic University

B.S.N., Fisk University; M.A., University of Chicago

Kathleen Sherrell

Assistant Professor of Nursing
B.S., Marquette University; M.S., St. Xavier College

Michael Shirk

Instructor of Health Systems Management
B.A., Lake Forest College; M.S., M.B.A., Loyola University

Joan Siegel

Assistant Professor of Medical Technology
B.S., University of Massachusetts; M.A., Mt. Holyoke College;
Ph.D., University of Massachusetts

Associate Professor of Nursing

of America

Iris Shannon

Linda Simko Instructor of Nursing

Juliann Spoth

Carol Taylor

Jane Tarnow

Judy Trufant

Jane Ulsafer

Judith Voeller

Gail L. Warden

Patricia Weirauch

Wanda Weiss

Silas Weir

Deborah A. Waterman

Betty Tarsitano

B.S., Northern University; M.S., University of Illinois

Mary Sovik Instructor of Nursing

B.S., St. Xavier College; M.S., Loyola University

Instructor of Nursing

B.S.N., State University of New York at Buffalo;

M.S.N., Case Western Reserve University

Joyce Stoops Instructor of Nursing

B.S.N., M.S.N., Indiana University

Marjorie Stumpe Assistant Professor of Medical Technology

B.S., Roosevelt University; M.A., Governors State University

Instructor of Nursing

B.S.N., Duke University; M.S., Rush University

Instructor of Nursing

B.S.N., DePaul University; M.S.N., St. Louis University

Associate Professor of Nursing

B.S.N., Creighton University; M.S.N., Catholic University of

America; Ph.D., University of Nebraska

Instructor of Nursing

B.S.N., University of Kansas; M.S.N., University of Florida

Assistant Professor of Nursing

B.S., M.S., University of Colorado

Kathleen Umbeck Instructor of Nursing

B.S.N., M.S.N., University of Pennsylvania

Instructor of Nursing

B.S., College of St. Catherine; M.P.N., University of Minnesota

Associate Professor of Health Systems Management

B.A., Dartmouth College; M.H.A., University of Michigan

Instructor of Clinical Nutrition

B.S., Iowa State University; M.S., Rush University

Instructor of Health Systems Management

B.A., Northwestern University; M.H.A., University of Michigan

Assistant Professor of Nursing

B.S.N., DePauw University; M.H.A., University of Michigan

Assistant Professor of Nursing

B.S.N., Wayne State University; M.S.N., Boston University

97

"Nurse specialists, acting as teacher/practitioners, can effect a marked improvement in both the quality of nursing education and nursing care."

Luther Christman, Ph.D., Dean





The Executive Board and the Trustees of Rush-Presbyterian-St. Luke's Medical Center

Edward McCormick Blair, Chairman Harold Byron Smith, Jr., Vice Chairman Frederick G. Jaicks, Vice Chairman James A. Campbell, M.D., President Lloyd W. Bowers, General Counsel

Members

- *Roger E. Anderson A. Watson Armour, III Thomas G. Ayers
- *Ralph A. Bard, Jr.
- *Edward C. Becker John P. Bent
- *Edward McCormick Blair
- *Edward F. Blettner William F. Borland
- **Robert C. Borwell, Sr. Lloyd W. Bowers B. A. Bridgewater, Jr. R. Gordon Brown, M.D.
- *Joseph A. Burnham Byron C. Campbell
- *James A. Campbell, M.D. Mrs. George S. Chappell, Jr. The Rev. Robert I. Christ
- *Kent S. Clow, Jr.
- **William M. Collins, Jr. David W. Dangler Frederic A. dePeyster, M.D. Mrs. Herbert C. DeYoung
- *Albert B. Dick, III
- **Elliott Donnelley Thomas E. Donnelley, II H. James Douglass Anthony Downs Bernard J. Echlin
- **Albert D. Farwell Wade Fetzer Marshall Field
- **James B. Forgan Robert Hixon Glore
- *Robert C. Gunness
- **William J. Hagenah
- *Stanley G. Harris, Jr.
- *Augustin S. Hart, Jr. The Rev. Everett A. Hewlett
- *Frederick G. Jaicks
- *Edgar D. Jannotta
- *Philip N. Jones, M.D.
- *Mrs. William G. Karnes
- **Frank B. Kelly, Sr., M.D.
- *Members of the Executive Board

**Life Trustees

Organization

Thomas A. Kelly Vernon R. Loucks, Jr. The Rev. Ross M. Ludeman Brooks McCormick

- **Edward D. McDougal, Jr. The Rt. Rev. James W. Montgomery
- **Kenneth F. Montgomery Mrs. Paul W. Oliver James E. Olson
- **William A. Patterson The Rt. Rev. Quintin E. Primo, Jr.
- *Robert P. Reuss Thomas H. Roberts, Jr.
- **Herbert P. Sedwick Charles H. Shaw, Jr. William D. Sicher, M.D. John W. Simmons Richard W. Simmons
- **John M. Simpson
- *Harold Byron Smith, Jr. Solomon B. Smith Justin A. Stanley E. Norman Staub
- **E. Hall Taylor
- *Richard L. Thomas T. M. Thompson Mrs. Calvin D. Trowbridge Wayne Won Wong, M.D. Arthur M. Wood William T. Ylvisaker *George B. Young

The Medical Center Cabinet

James A. Campbell, M.D., President Gail L. Warden, Executive Vice President and Secretary Donald R. Oder, Vice President, Finance and Treasurer William F. Hejna, M.D., Vice President for Medical Affairs and Dean of Rush Medical College Luther Christman, Ph.D., Vice President for Nursing Affairs and Dean of Rush College of Nursing and Allied Health Sciences David I. Cheifetz, Ph.D., Acting Dean of Rush Graduate College Howard R. Jones, Vice President for

Administrative Affairs and Administrator of Presbyterian-St. Luke's Hospital Sheldon Garber, Vice President, Development and Communication Nathan Kramer, Vice President.

Health Care Planning Max E. Rafelson, Ph.D., Vice President,

Management Information Sciences and Services

John S. Graettinger, M.D., Dean of Faculty Affairs, Rush University, Director of Graduate and Continuing Medical Education

Rush University

James A. Campbell, M.D., President John S. Graettinger, M.D., Dean of Faculty Affairs, Director of Graduate and Continuing Medical Education Joe Swihart, M.S.Ed., Registrar Wayne Franckowiak, B.S., Director of Financial Affairs

The College of Nursing and **Allied Health Sciences**

Luther Christman, Ph.D., Dean, College of Nursing and Allied Health Sciences Leon Dingle, Jr., Ph.D., Dean, Office of Allied Health Sciences Yvonne Munn, M.S.N., Associate Dean, College of Nursing and Allied Health Sciences Lucille Davis, Ph.D., Assistant Dean of the Graduate Nursing Program Mary Ann Eells, E.Ed., Assistant Dean of the Undergraduate Nursing Program Mary Glessner, M.A., Assistant Administrator, Nursing Affairs Ruth Johnsen, A.M., Assistant to the Dean, Director of Admissions Barbara S. Schultz, B.A., Director of High School/College Relations Kathe Brown, M.A., Administrative Assistant for Student Affairs Peggy Lusk, M.S., Director, Counseling Services Sue Hegyvary, Ph.D., Chairperson, Department of Medical Nursing Robert Lyons, M.S., Acting Chairperson, Department of Pediatric Nursing Dorice Narins, Ph.D., Chairperson, Department of Clinical Nutrition Ann Neeley, Ph.D., Chairperson, Department of Obstetrics and Gynecological Nursing Iris Shannon, M.A., Chairperson, Department of Community Health Nursing Joyce Stoopes, M.S., Associate Chairperson, Department of Surgical and Operating Room Nursing Marge Stumpe, M.A., Chairperson, Department of Medical Technology Jane Ulsafer, M.S., Acting Chairperson, Department of Psychiatric Nursing Gail Warden, M.H.A., Acting Chairperson, Department of Health Systems Management

Rush Medical College

William F. Hejna, M.D., Dean of Rush Medical College Robert W. Carton, M.D., Associate Dean of Medical Sciences and Services L. Penfield Faber, M.D., Associate Dean of Surgical Sciences and Services David I. Cheifetz, Ph.D., Associate Dean of Biological and Behavioral Sciences and Services George C. Flanagan, M.D., Associate Dean of Curricular Affairs Leo M. Henikoff, M.D., Associate Dean

of Student Affairs Norma Wagoner, Ph.D., Assistant Dean of Admissions

Wayne Lerner, M.S., Assistant to the Dean

Rush Graduate College

David I. Cheifetz, Ph.D., Acting Dean of Rush Graduate College



Index

Absences, 45 International Students, 31 Academic Policies, 43 Independent Study, 73 Activities, Social and Cultural, 40 Knox College, 20 Admissions, 27 Lake Forest College, 21 Admissions, Clinical Nutrition, 30 Lawrence University, 22 Admissions, Graduate Nursing, 30 Macalester College, 23 Admissions, Medical Technology, 27 Medical Center Map, Admissions, Undergraduate inside back cover Nursing, 27 Medical Nursing, 67 Advanced Placement, 28 Medical Technology, 49 Affiliated Colleges, 11 Monmouth College, 24 Affiliated Hospitals, 38 New Academic Facility, 37 Alumni Association, 34, 41 Nursing, Graduate, 63 Beloit College, 12 Nursing, Undergraduate, 54 Calendar, inside front cover Off-Campus Enrollment, 44 Campus and Student Life, 37 Oncology Nursing, 67 Carleton College, 13 Organization, 99 Clinical Nutrition, 59 Part-Time Study, 43 Coe College, 14 Philosophy, 5 Colorado College, 15 Post-Master's Study Geriatric Community Nursing, 64 Nursing, 69 Cornell College, 16 Pre-Health Curriculum, 49 Course Descriptions, 71 Presbyterian-St. Luke's Hospital, 38 Course Offerings, 75 Programs, 8 Credit, by Examination, 43 Psychiatric Nursing, 68 Credit Hours, 43 Refunds, 34 Deferred Tuition Payment, 33 Registration, 44 Doctoral Study, 69 Ripon College, 25 Expenses, 33 Rush Graduate College, 7 Faculty Roster, 93 Rush Medical College, 7 Financial Affairs, 33 Rush-Presbyterian-St. Luke's Financial Aid, 34 Medical Center, 7, 37 Fisk University, 17 Rush Tradition, 7 Geriatric/Gerontological Rush University, 7, 37 Nursing, 66, 69 Schools of the University, 102 Grades, Graduate, 45 Student Progression, Graduate, 46 Grades, Undergraduate, 44 Student Progression, Graduation Requirements, 47 Undergraduate, 46 Graduate Programs, 59, 63 Surgical Nursing, 67 Grinnell College, 18 Transfer Applicants, 27 Health Services and Counseling, 39 Transfer Credit, 27 Housing and Transportation, 39 Tuition and Fees, 33 Illinois Institute of Technology, 19 Undergraduate Programs, 49

Rush University

The colleges of Rush University are located at the main campus of Rush-Presbyterian-St. Luke's Medical Center at 1753 West Congress Parkway, Chicago, Illinois 60612.

Rush Medical College

The College of Nursing and Allied Health Sciences

Rush Graduate College

Affiliated Colleges

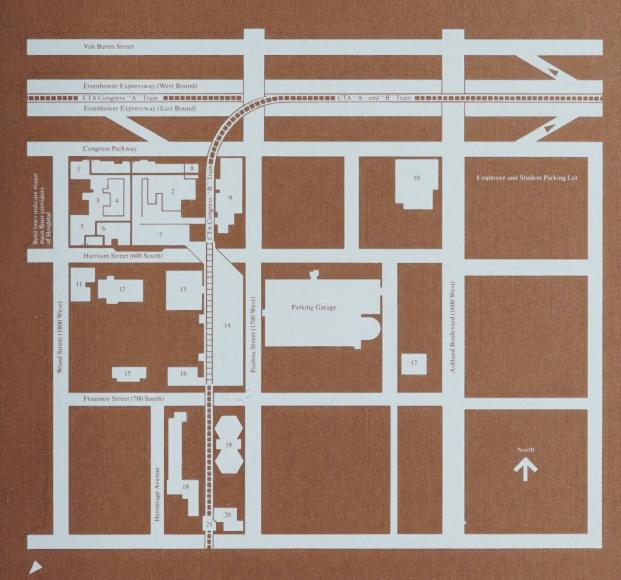
Beloit College, Beloit, Wisconsin 53511
Carleton College, Northfield, Minnesota 55057
Coe College, Cedar Rapids, Iowa 52402
The Colorado College, Colorado Springs, Colorado 80903
Cornell College, Mount Vernon, Iowa 52314
Fisk University, Nashville, Tennessee 37203
Grinnell College, Grinnell, Iowa 50112
Illinois Institute of Technology, Chicago, Illinois 60616
Knox College, Galesburg, Illinois 61401
Lake Forest College, Lake Forest, Illinois 60045
Lawrence University, Appleton, Wisconsin 54911
Macalester College, St. Paul, Minnesota 55105
Monmouth College, Monmouth, Illinois 61462
Ripon College, Ripon, Wisconsin 54971

Clinical Network

Bethany Brethren/Garfield Park Hospital, Chicago, Illinois Central DuPage Hospital, Winfield, Illinois Christ Hospital, Oak Lawn, Illinois Community Memorial General Hospital, LaGrange, Illinois DeKalb Public Hospital, DeKalb, Illinois Galesburg Cottage Hospital, Galesburg, Illinois Mile Square Health Center, Inc., Chicago, Illinois Mount Sinai Hospital Medical Center, Chicago, Illinois Swedish Covenant Hospital, Chicago, Illinois West Suburban Hospital, Oak Lawn, Illinois

For more information Call or write: The College of Nursing and Allied Health Sciences Rush University 1743 West Harrison Street Chicago, Illinois 60612 (312) 942-5823

Rush-Presbyterian-St. Luke's **Medical Center Rush University Campus**



- 2 East Pavilion
- 4 Cafeteria

- 7 Jelke Southcenter

- 10 Columbia Bank Note Building (Print Shop and Storage)
 11 Loyola Building
- 12 Schweppe Sprague Building 13 Professional Building 14 Academic Facility

- 15 Kidston Apartments
 16 McCormick Apartments
 17 Lawrence Armour Day School
 18 Marshall Field IV Mental
- Health Center

 19 Johnston R Bowman
 Health Center for the Elderly
 20 Central Refrigeration Plant
 21 Polk Street Station, CTA

